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THE A B C OF INFLATION

THE A B C OF INFLATION

*With Particular Reference to
Present-day Conditions in the United States*

BY

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New York WHITTLESEY HOUSE *London*
M C G R A W - H I L L B O O K C O M P A N Y , I N C .

THE A B C OF INFLATION

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TO MY SON
DONALD L. KEMMERER

PREFATORY NOTE

In the sphere of economics the strongest and most widespread popular conviction in Europe resulting from the First World War was that serious inflation was a terrible scourge and should never again be permitted. Nonetheless, today, in a Second World War, less than a quarter of a century after the Treaty of Versailles, not only most of Europe but nearly all the rest of the world is experiencing substantial inflation and it is progressing rapidly on much the same lines as it did in the early years of the First World War.

Epitomized in a few words, the outstanding reason is that, in time of war, prodigious sums of money must be raised quickly and with a minimum of public resistance. This inflation does, but it does it only at a heavy cost financially and in public welfare. The penalties are heavy but they are postponed. Financing a war largely by inflation is usually the line of least political resistance. The resort of a nation to financing by inflation has often been compared to the resort of an individual to opium smoking. The first sensations are pleasant, but the more one takes, the more he wants. The appetite grows by what it feeds upon; the more one indulges the weaker become his powers of resistance.

PREFATORY NOTE

Inflation is already well on its way in the United States. If it is to be controlled it must be curbed promptly. This demands vigorous action by the government—much more vigorous than that we have had in this matter up to the present time. To this end the public must be made aware of the simple facts of the situation and of the elementary economic principles involved, and must be aroused to demand of its political representatives prompt and vigorous action. *The A B C of Inflation* is written in the hope that it will contribute to this end.

In the preparation of the book I am indebted for valuable aid to many friends—too many to mention by name in a brief prefatory note. I must, however, make exception by expressing my particular gratitude to a few of them. Dr. William W. Cumberland of Wellington and Company, New York City, and my son, Dr. Donald L. Kemmerer of the University of Illinois, both read the entire manuscript and made numerous valuable suggestions, most of which I have adopted. My secretary, Miss Emily Wilson, has rendered throughout the preparation of the book most willing and efficient assistance.

EDWIN WALTER KEMMERER.

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THE A B C OF INFLATION

CHAPTER I

WHAT IS INFLATION?

FOR several years prior to 1939 there was in the United States a widespread fear that the country was heading toward serious inflation. This fear was greatly increased by the outbreak of the Second World War and by our subsequent entrance into the war, with its resulting tremendous military and naval expenditures. At this writing, in the summer of 1942, we have already experienced substantial inflation, and in the judgment of most economists there is much more in prospect.

WAR AND INFLATION

Historically speaking, inflation is a usual accompaniment of war and of postwar readjustments. During the last century and a half at least, in connection with every great war in Europe, with the possible exception of France in the Napoleonic Wars, the principal belligerents have all experienced serious inflation. This is true, for example, of the French Revolution, with its notorious assignats and magnats, of England's wars at the beginning of the nineteenth

century, with their depreciated Bank of England notes, and of the Franco-Prussian War.

The widespread inflation of the period of the First World War and the years immediately following is still a tragic memory for many millions of people in Europe. In some belligerent countries, such as Germany, Russia, Poland, Hungary, and Austria, the inflation carried the cost of living to astronomical heights. In others, the inflation, though very serious, was not astronomical; for example, in France, Belgium, and Italy, advances in the wholesale-price level reached magnitudes of the order of 300 to 600 per cent. In some other belligerent countries inflation, though real, was of a still lower order of magnitude. In England between 1914 and 1920 the wholesale-price level rose 195 per cent. During the present war wholesale prices in England have already increased 63 per cent (August, 1939, to June, 1942).

Our own country has fought four important wars in addition to the present one, namely, the American Revolution, the War of 1812, the Civil War, and the First World War. In the American Revolution the cost of living rose to spectacular heights with the Continental paper currency; during the War of 1812 our wholesale prices rose 54 per cent in $2\frac{1}{2}$ years; during the Civil War from the firing on Fort Sumter in April, 1861, to Lee's surrender 4 years later our wholesale-price level rose 150 per cent; and from the outbreak of the First World War in 1914 to the

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peak of the postwar inflation in May, 1920, it rose 140 per cent.

In all these cases of wartime inflation, governmental authorities and the intelligent public realized that financing by means of heavy inflation was a bad public policy and strove to prevent it, but their efforts were of little avail.

INFLATION IN THE UNITED STATES ALREADY BEGUN

Since August, 1939, the month before Germany's invasion of Poland and the formal declaration of war by Great Britain and France, the tendency of prices in the United States has been upward. The Bureau of Labor Statistics' comprehensive index number of wholesale prices, covering about 900 commodities, rose 31 per cent from August, 1939, to July, 1942, and the bureau's index number of the prices of 28 basic commodities¹—prices that are much more sensitive to inflationary forces than the general run of commodity prices—rose 67 per cent. According to the figures of the National Industrial Conference Board, the cost of living increased during the period August, 1939, to June, 1942, by 16 per cent.

To most people figures like these mean that inflation is already well on its way.

¹ This is a daily price index of basic commodities published weekly by the Bureau of Labor Statistics. It covers important agricultural commodities and metals, both domestic and imported, and a few fabricated commodities such as print cloth, silk, and steel scrap.

WHAT IS INFLATION?

The word *inflation* is one used with a great variety of meanings. It will be well, therefore, in the interest of clarity to explain here the meaning given to it in this discussion. A definition is a tool of thought and expression, and two of the most desirable qualities of a definition are precision and simplicity. A definition, to be workable, must define, or mark, the boundaries of a concept and must be easily understood. Most definitions of inflation fall short of one or both of these requirements. Many of them employ in referring to price advances such terms of degree as *excessive* or *great*, terms which lack precision and have different meanings for different people.¹ Many others are so complicated as to be unworkable. I shall not discuss further the various possible meanings of the word but shall merely explain the meaning I am giving it here, a meaning which has strong scientific support and which has the advantages of being simple and of conforming to widespread popular usage. It is, I believe, a thoroughly workable concept.

Inflation is too much money and deposit currency—that is, too much currency in relation to the physical volume of business being done. Money is a thing

¹ For example, an article in the *Federal Reserve Bulletin* of April, 1941 (pp. 291-292), defines inflation as "an excessive and dangerous general advance in activity and prices" and then on the following page speaks of preventing a "moderate" inflation from "assuming major proportions."

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of economic value, and its value, or purchasing power, is expressed in prices. The more dollars it takes to buy a ton of coal, a bushel of wheat, or a definite quantity of any other commodity, the less valuable is money in terms of that commodity. "Cheap" money means high prices, and "dear" money means low prices. If you pump enough money into circulation, you can push up prices to any height. Germany, for example, after the First World War ran her monetary circulation up to hundreds of quintillions of marks, and thereby multiplied her prices on the average about a trillion fold from 1913 to 1923. Large issues of money mean high prices because the law of supply and demand applies to money as it does to every other commodity. Inflation, then, exists when prices rise because there is too much money and deposit currency in circulation, in relation to the volume of goods and services to be exchanged. Speaking with more precision, we may say that inflation occurs in any country whenever the supply of currency, that is, of money and of bank deposits subject to check, increases relatively to the demand for currency, as expressed in the volume of goods and services to be exchanged, thereby causing a rise in the general price level. This is the essence of inflation. Like most brief descriptions of highly complex things, however, this statement requires some qualification and interpretation to avoid misunderstanding.

The supply of money and the supply of deposit

currency must always be interpreted in terms of their respective velocities of circulation. Something like 90 per cent of our business is performed by means of deposit currency (bank checks), and only about 10 per cent is done directly by means of money. Just as the supply of freight services available in a country depends upon the speed with which the freight trains move as well as upon the number of freight cars available, so likewise does the supply of our circulating mediums depend upon the velocities at which the money and bank deposits circulate as well as upon the number of dollars of money and bank deposits in circulation. A doubling, for example, of the average velocities would be equivalent in its influence on prices to a doubling of the number of dollars of the circulating mediums with velocities remaining unchanged. Velocities in general are low in periods of depression and high in periods of prosperity.

If the law of supply and demand applies to money and to deposit currency, that is, to our mediums of exchange, as it certainly does, the price level can rise only when the supply of the circulating mediums increases relative to the demand and can fall only when it decreases relative to the demand. When the price level rises, we have inflation; when it falls, we have deflation. A slight inflation or deflation is not of much consequence. But when either of these becomes substantial, it is likely to have serious consequences.

We are concerned here with the problem of inflation, the danger now confronting us. We should note

WHAT IS INFLATION?

in passing, however, that deflation in its consequences may be as serious as inflation, a sad lesson which the American people have learned on many occasions, the most recent one having been the years 1929 to 1933. Deflation, however, is not likely to be carried to such extremes as inflation. The political resistances to it are much greater.

The type of inflation here described is sometimes called general inflation, as contrasted with inflation in limited fields, such as stock-market inflation, food-price inflation, and inflation of rents and wages. Unless the term *inflation* is specifically limited, it should be taken to mean general price inflation and to cover prices of all kinds of goods and services.

INFLATION MAY BE VIEWED FROM TWO ANGLES

In speaking of price advances under the pressure of inflationary forces, the important fact to note is that every commodity price is an expression of the market conditions for the commodity itself and also for the money in terms of which the price of the commodity is quoted. If, for example, one says that the price of eggs is 40 cents a dozen, he expresses the value of eggs in terms of the value of money, and also the value of money in terms of the value of eggs. If eggs should become increasingly scarce, their price in terms of money would go up, and the value of money in terms of eggs would go down; if, on the other hand, money should become increasingly

plentiful, the price of eggs would likewise go up, and the value of money in terms of eggs would go down. To take an extreme example—and we can often best illustrate by extreme examples—the price of eggs in Germany in late 1923 was more than a trillion marks a dozen, a fact obviously due chiefly to a tremendous oversupply of money rather than to any great scarcity of eggs. The difference between individual prices and the general price level is often illustrated by a lake which has widely varying depths in different parts and which, being whipped by a storm, has an almost infinite number of waves. An individual price is the perpendicular distance from the surface of the lake at any point to the bottom, and the general price level is the level of the lake.

CHAPTER II

CAUSES OF INFLATION VIEWED FROM THE MONETARY ANGLE

VIEWED from the monetary angle, the principal forces making for American inflation may be classified roughly under the following four headings, which, it will be recognized, to some extent overlap: (1) deliberate monetary and deposit-currency expansion, or planned inflation; (2) fiscal inflation, or the monetization of government deficits; (3) increased supply of gold; and (4) increased velocities of circulation of deposit-currency and money. Let us consider briefly these causes in their order.

1. DELIBERATE MONETARY AND DEPOSIT-CURRENCY EXPANSION, OR PLANNED INFLATION

President Roosevelt early in his first administration announced his determination to bring about a substantial rise in commodity prices. This "reflation" was intended to raise the commodity price level by about 50 per cent, thereby bringing it to approximately what it was during the comparatively stable-price-level years 1921 to 1928. The primary object of

this reflation effort was to lighten the burden imposed upon the debtor classes by the appreciation in the purchasing power of the dollar which took place during the critical deflation period of 1929 to 1933.

The government adopted a number of devices to accomplish this purpose, of which the following were the more important:

1. The devaluation of the gold dollar, reducing its gold content by 41 per cent and thereby tending *ultimately* to make the commodity-price level something like 69 per cent higher on a gold-standard basis than it would have been had the devaluation not been made.

2. Large open-market purchases of government debt and bank acceptances by the Federal Reserve banks—a policy adopted during the Hoover administration and continued during the early months of the Roosevelt administration. The object was to expand the circulation of Federal Reserve notes and deposits by spending an increasing amount of them for the purchase of these securities.

3. The Administration's silver-purchase policy, culminating in the Silver Purchase Act of June 19, 1934, which declared it to be the policy of the government that "the proportion of silver to gold in the monetary stocks of the United States should be increased, with the ultimate objective of having and maintaining, one-fourth of the monetary value of such stocks in silver." From June, 1934, to the present time (June 30, 1942) the circulation of silver

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certificates has increased from \$401 million to \$1,754 million, and for the same period the amount of silver certificates held by Federal Reserve banks and agents has increased from \$93 million to \$216 million. In addition to this present total of approximately \$2 billion of silver certificates outside the Treasury, backed dollar for dollar by silver dollars, the government itself holds in the general fund enough silver bullion to "back" 100 per cent at coinage value a further issue of about \$1.8 billion in silver certificates. The government, however, is still buying silver for monetary purposes, although the volume of our gold has increased so rapidly since 1934 that we are not much nearer the silver-gold monetary ratio of 1 to 3 than we were when we began in 1934.

4. The government's declared "cheap-money," or low-interest-rate policy, as evidenced in Federal Reserve-bank-discount and open-market rates and in the interest rates charged by government and quasi-government lending agencies.¹ Low interest rates by

¹ In general, interest rates recently have been the lowest in our history, or in that of any other advanced country. A few typical examples are the following average rates for June, 1942, the last month for which figures at this writing are available, taken from the *Federal Reserve Bulletin*, August, 1942, p. 825:

	Per Cent
Customers' commercial-loan rates charged by banks in 19	
principal cities	2.62
Commercial paper, 4 to 6 months, New York City	0.69
Call loans, renewals on New York Stock Exchange	1.00
Corporate bond (AAA) yields	2.85
Municipal bond yields	2.38
United States Government bond yields	1.97
United States Treasury notes, 3 to 5 years, taxable	1.15
United States Treasury, 3-months bills	0.363

making borrowing cheap tend to bring about an expansion of bank loans, which, in turn, causes an increase of deposit currency. This increase in circulating bank deposits, with which we do most of our business, is an inflationary force.

2. FISCAL INFLATION, OR THE MONETIZATION OF GOVERNMENT DEFICITS

The second kind of inflationary forces, as viewed from the monetary angle, may be grouped under the term "fiscal inflation." It includes the inflationary measures adopted by the government as a means of providing itself with funds for paying government expenses. This represents the practical conversion into bank notes and, more importantly, into bank deposits, of government deficits through the purchase of government debt by banks or through the making of loans by banks on the collateral of government debt.

Recent Increase in Government Expenditures and Taxes. For the 7 years ending June 30, 1941, our national government expenditures (exclusive of debt retirement) amounted to \$63 billion. Tax collections for the same period were approximately \$37 billion. In other words, during a period of 7 years of peace, the national government spent 70 per cent more than the revenue it received, representing an annual average deficit of about \$3.7 billion, this deficit being an amount 25 per cent greater than our entire national-

CAUSES OF INFLATION: MONETARY ANGLE

government expenditures in the boom year 1929. Furthermore, and this is important to note, during this same time there was a great increase in taxes. Within these 7 years annual federal tax revenues rose from \$2.9 billion to \$7.8 billion, an increase of 169 per cent, while the tax collections of other divisions of government—state and local—rose from \$5.9 billion to \$9.5 billion,¹ an increase of 62 per cent. Total tax collections per capita were approximately \$69 in 1934 and \$178 in 1941.

Immediately after Pearl Harbor we entered upon a strenuous program of war expenditures for which no one thinks of counting the cost and which promises to carry our federal expenditures to heights never before even dreamed of. Total federal expenditures (exclusive of debt retirement) rose from \$12.7 billion in the fiscal year 1941 to \$32.6 billion in 1942, and, at this writing, the latest budget estimate for the fiscal year 1943 places the figure for that year at \$77.5 billion, which is more than six times as great as for 1941 and over four times as great per month as for the last 10 months of the First World War.

Government Debt as a Source of Inflation. A large part of the vast sums that the federal government borrowed from the crisis of 1929 to the time of our entrance into the Second World War was not obtained in the old-fashioned way of selling govern-

¹ National Industrial Conference Board, *Economic Almanac, 1941-1942*, p. 360, and *Road Maps of Industry*.

ment bonds to private investors, to be held by them as investments in their safe-deposit vaults, but was obtained as a result of sales of government debt to banks, in payment for which the banks gave deposit-currency credit. This is an inflationary process. It converts government debt into new bank deposits that circulate by check. The government's deposits are increased, but the deposits of individuals are not correspondingly decreased, as they would be if the public were buying the bonds and paying for them in full out of current income and accumulated savings. Of the total national-government debt at the end of 1941, both direct and fully guaranteed, amounting to about \$64 billion, approximately \$24 billion, or about 38 per cent, was owned by our commercial banks and the 12 Federal Reserve banks. At the end of the year 1941 holdings of these United States Government obligations by operating insured commercial banks alone were approximately \$21 billion, or an amount equal to three times all capital funds of these banks or seven times their capital.¹ At the present time (August, 1942) approximately 95 per cent of all the earning assets of our 12 Federal Reserve banks consist of United States government debt and loans secured by this debt.

¹ According to the National Industrial Conference Board, fully three-fifths of all new federal government borrowing in the fiscal year 1943 will be supplied by commercial banks, whose purchases of government debt for that year will fall only slightly short of five times (*i.e.*, \$29 billion) the amount so absorbed in the fiscal year 1942.—*Road Map of Industry*, June 12, 1942.

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This sort of thing, when long continued under an inconvertible currency like our own, spells inflation. It is the kind of inflation that took place in Germany after the First World War, except for the fact that the expansion of circulating credit there occurred mostly in the form of bank notes instead of bank deposits, a difference of no fundamental importance.

Describing this German experience, Dr. Hjalmar Schacht, former president of the Reichsbank, said:

The German war finance consisted mainly in the Reich satisfying its needs as they arose by the discount of Treasury bills and bonds at the Reichsbank, the floating debt thus incurred being funded (so far as possible) twice a year by the public issue of long-term loans. . . . What the public at large, and all but a very few of the country's economic leaders, failed adequately to appreciate was the fact that inflation on a heavy scale was the concomitant of the whole of this form of war finance.¹

The bank notes of the German central bank were secured largely by German government bonds, and the bonds were payable in the notes, just as our government bonds today are payable at the discretion of the government in Federal Reserve notes as well as in any other form of United States money.

Fortunately, during the last year our government seems to have realized, though belatedly and inadequately, the inflation potential² of large bank holdings of government debt, either direct or in the form of collateral for loans, and is now making strong ef-

¹ *The Stabilization of the Mark*, pp. 14-15.

² *Cf.*, pp. 52-55.

forts to encourage the absorption of the debt by private investors to the maximum extent possible.

To this end the government is now issuing a variety of securities, some of which are available in low denominations and on terms particularly advantageous to the small investor, and is vigorously pushing an educational campaign to encourage the purchase of government debt out of current income. Some of the government's debt is now being issued with restrictions intended to keep it out of the commercial banks, where it could serve as a basis for deposit-currency expansion, and to have it kept in the strong boxes of the permanent investor. These restrictions cover such matters as upper limits on the amount that can be bought by one person in a given period, some limits on transferability, and concessions in interest yields to persons who hold the securities a substantial period of time. An interesting example of a recent bond issue calculated to be of a noninflationary type is the 2½'s of 1962-67, which were allotted in full without limitation as to amount for any one purchaser and which were made nontransferable for 60 days and not eligible for transfer to commercial banks for 10 years. Such measures as these are highly commendable means for checking inflation.

There are in addition to the deliberately planned inflationary measures and the fiscal inflation just discussed, two other important monetary causes of inflation. One of these has been in operation for about

8 years, and the other seems inevitable for the future. They are increased supply of gold and increasing deposit-currency velocities.

3. INCREASED SUPPLY OF GOLD

As long as the United States remains upon its present form of the gold standard, under which the value of the dollar is administratively maintained at one-thirty-fifth of an ounce of gold, the country's commodity-price level will be influenced by its supply of monetary gold, a supply that will be fed chiefly by the world's production of new gold and the transfer of previously produced gold to the United States from abroad. When the government fixes the price for pure gold at \$35 of paper money an ounce (that is, for 480 grains troy), buys all the gold offered to it at this price, stands ready to sell at this price to the central banks of friendly governments, and also makes it possible for gold to be exported and imported in substantial quantities and without tariff and other charges, it creates a gold standard with a unit of value consisting of an uncoined dollar weighing 13.71 grains of pure gold, which is one-thirty-fifth of an ounce.¹

Since the crisis year 1929 the mines of the world have been pouring out gold as never before in history. During this short period the world's production

¹ See E. W. Kemmerer, *The Gold Standard—Its Nature and Future*, pp. 5-7.

of the yellow metal has been equivalent to over half of its entire stock of monetary gold in 1929 and has been greater than all the monetary gold in the world at the beginning of the First World War. This recent great increase in the world's gold production is a force tending to make gold cheaper in terms of other goods, in other words, tending to push up commodity prices in gold-standard countries, so-called "gold inflation."¹

A large part of the recent heavy flow of gold to the United States has been due to conditions of war, threatened and actual, in Europe and Asia. Our own American stock of monetary gold has been more than doubled since October, 1935. Before the present world war began, funds in the form of gold came to this country in substantial quantities as a flight of capital from war-scared Europe and Asia, with the primary object of safety. After 1939 and up to the time of our own entrance into the war, this flow of gold largely constituted a means of payment for our enormous shipments of war supplies to the enemies of Hitler. When peace returns, a return flow of these funds will probably take place, as it did after the First World War.

4. PROBABLE INCREASE IN DEPOSIT VELOCITIES

Another inflationary force that is continually threatening is a great increase in the velocities of

¹ See E. W. Kemmerer, *Our Present Gold Problem*, pp. 6-14.

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our bank-deposit currency. These velocities for the two years 1940 and 1941, as shown by the following

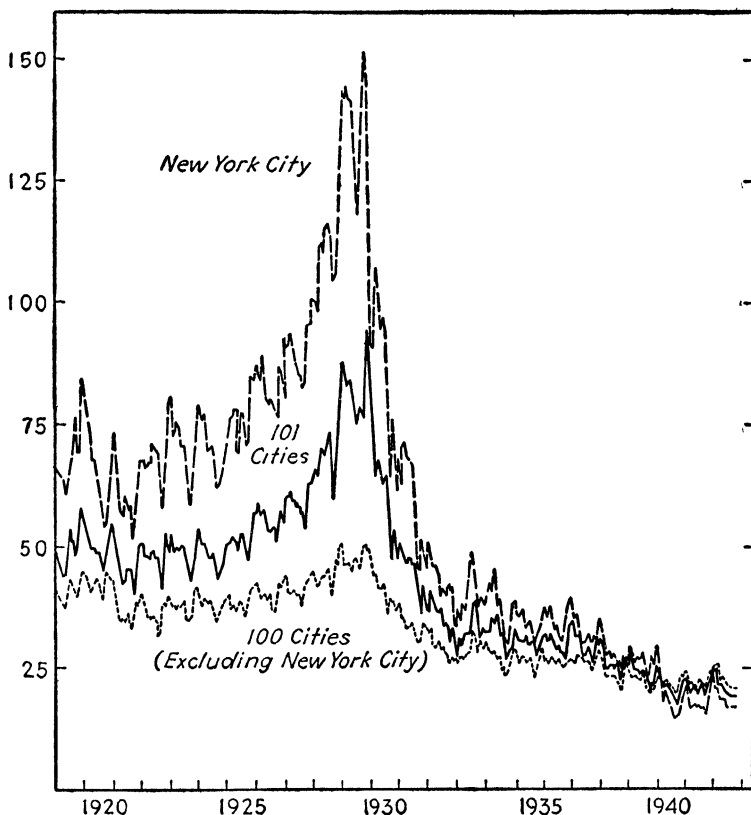


CHART I.—Annual rate of turnover of demand deposits, 1919–1942.

chart,¹ averaged the lowest for any two years since records of velocities began in 1919. For the reporting banks of 101 leading cities the average velocity was

¹ Based on figures furnished by the Federal Reserve Bank of New York.

21 for 1941, as compared with 80 for the boom year 1929 and 55 for the supposedly normal year 1926. Velocities have been slightly higher for the first 7 months of 1942 than for the corresponding months of 1941 and may be expected to increase for a while in the future as confidence¹ is built up under the stimulus of our vigorous war-production program.

Inflationary Powers of the President. At this point it may be well to note that, as viewed from the monetary angle, many large inflationary powers are now concentrated in the hands of the President and his appointee the Secretary of the Treasury. These powers, some of which the President wisely has refrained from using, have been conferred for the most part as emergency powers, subject to renewal at 2-year periods by Congress, which under our Constitution possesses the sole right "to coin money [and] regulate the value thereof. . . ." Among the more important of these powers the following may be cited.²

a. GOLD CONTENT OF THE DOLLAR. The President has the power virtually to fix the gold content of the American dollar, our unit of value, at any weight he may wish and to change it at will. Under the so-called Thomas Amendment of May 12, 1933, the

¹ For a discussion of the relationship between confidence and velocities, see E. W. Kemmerer, *Controlled Inflation*, *American Economic Review*, Supplement, March, 1934, pp. 92-100.

² See testimony of E. W. Kemmerer, *Hearings on Devaluation of the Dollar and Stabilization Fund*, U.S. Senate Committee on Banking and Currency, 77th Congress, 1st Session, June 19, 1941, pp. 31-41.

CAUSES OF INFLATION: MONETARY ANGLE

President may by proclamation fix the weight of the gold dollar in grains of gold nine-tenths fine, at any point between the equivalent of 50 and 60 cents of the old gold dollar, which would be between 50 and 60 per cent of 23.22 grains of pure gold, *i.e.*, between 10.61 grains and 13.93 grains. Under this authority the President fixed the gold content of the dollar in January, 1934, at 13.71 grains of pure gold, or the equivalent of 59.06 cents of our old gold dollar. At this gold value it is still maintained.

But even this "50 to 60 cent" limitation on the President's power to change the gold value of the dollar appears to have been removed by the enactment of Sections 8, 9, and 10 of the Gold Reserve Act of January 30, 1934. Section 8 provides that:

With the approval of the President, the Secretary of the Treasury may purchase gold in any amounts, at home or abroad, with any direct obligations, coin, or currency of the United States, authorized by law, or with any funds in the Treasury not otherwise appropriated, at such rates and upon such terms and conditions as he may deem most advantageous to the public interest; any provision of law relating to the maintenance of parity . . . to the contrary notwithstanding.

If the Secretary of the Treasury, with the approval of the President, is authorized to buy gold in unlimited quantities at any price "he may deem most advantageous to the public interest," and to "sell gold in any amounts . . . and at such rates . . . as he may deem most advantageous to the public interest . . ." (Section 9), it would appear that, in effect,

he can fix the gold content of the dollar wherever he wishes and without any limitation whatsoever. When, for example, the price for gold fixed by the government is \$35 an ounce, as at present, the dollar is given a gold value equivalent to that of one-thirty-fifth of 480 grains of gold, or 13.71 grains. If the price fixed by the government for gold should be raised to \$70 an ounce, a dollar would be equivalent in value to $\frac{1}{70}$ of 480 grains, or one-half the gold value of the present dollar, and, if the price were fixed at \$140 an ounce, in like manner the dollar would be given a gold value of one-fourth that of the present dollar, and so on, without any lower or upper limit.

With the government owning all the nation's monetary gold, as at present, and with the paper money of the country inconvertible, a President could realize for the government *unlimited devaluation profits* in terms of dollars by this simple process of debasement, and in this way he could obtain vast sums without any regard to the wishes of Congress.

b. MOVEMENT AND ACQUISITION OF GOLD. The Secretary of the Treasury, with the approval of the President, may determine to what extent, if any, gold may be exported, imported, acquired, held, or transported (Gold Reserve Act, Sec. 3). By damming up gold in the country the Secretary of the Treasury can therefore artificially depress the value of gold, and by prohibiting or restricting its importation he can artificially enhance its value.

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c. BIMETALLISM. The President possesses complete authority at his own will to commit the nation to bimetallism at the old Bryan ratio of 16 to 1 or at any other gold-silver ratio he may choose (Thomas Amendment).

d. GREENBACKS. The President may multiply our present circulation of United States notes, "greenbacks," approximately tenfold, that is, increase it to \$3 billion without any increase whatever in the \$150 million gold reserve that was created by the Gold Standard Act of 1900 exclusively for redemption purposes and is nominally maintained almost entirely for the protection of these greenbacks.

e. FEDERAL RESERVE BANK NOTES. Although Federal Reserve bank notes are now administratively in process of retirement, they may be issued again at any time by administrative authority and without further legislation up to the amount of 100 per cent of any United States government securities held as collateral or to 90 per cent of certain other specified securities. No cash reserve whatever is required to be held against them, except the 5 per cent redemption fund.

f. STABILIZATION FUND. The \$2 billion stabilization fund, of which the \$200 million set aside for active use has so far proved more than ample, is under the exclusive control of the Secretary of the Treasury (acting with the approval of the President), whose decisions the law says "shall be final and not subject to review by any other officer of the

United States." Reports on the operation of the fund are now made to Congress; almost unlimited discretion is given by the law to the Secretary of the Treasury as to the purposes for which the fund may be used.

g. SILVER. The silver legislation of 1934, as previously noted,¹ grants to the President another large monetary power by providing for the increase of the proportion of silver to gold in the monetary stock of the United States to an ultimate ratio of 1 to 3 and gives the President authority, if he so desires, to coin the silver seigniorage, amounting on Dec. 31, 1941, to about 1,353 million ounces of silver, equivalent at present coinage value to approximately \$1,800 million.

In this connection it should be noted that the President could further enormously expand our circulation of silver coin and silver certificates through the exercise of the powers given him by the Thomas Amendment ". . . to reduce the weight of the standard silver dollar in the same percentage that he reduces the weight of the gold dollar" and ". . . to reduce and fix the weight of subsidiary coins. . . ."²

¹ See pp. 12-13.

² Aside from the 60 million silver dollars, which circulate mostly in a few limited areas of our Western country, and about half a billion dollars of fractional silver coins, together containing about 350 million ounces of fine silver, our enormous supply of government-held silver performs no useful monetary function whatever. The value of our billion and three-quarters dollars of silver certificates in circulation is not determined or maintained by the cheap silver dollars "backing" them and

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All this legislation taken together gives to the President and his appointees a legal authority over the nation's currency that is almost complete. A Stalin or a Hitler could hardly have more. The things that the President has legal authority to do to the currency directly and their attendant implications could give us a gold standard, a silver standard, a bimetallic standard, a paper-money standard, or a commodity-dollar standard. They could give us serious deflation or a runaway inflation.¹

CURRENCY DEMAND

So much for present inflation possibilities from the point of view of the currency supply. The value of money, however, is a question of currency demand as much as it is a question of currency supply. The currency demand is the currency work to be done, and this currency work is chiefly the provision of exchange mediums or instruments for effecting payments for the purchase and sale of goods and services, for the making of loans, and for the payment of debts. Increases in the supply of currency, *i.e.*, of money and deposit currency, will not be inflationary

into which they are legally convertible, although in practice almost never converted. These silver certificates should be replaced by Federal Reserve notes, as a reserve for which we have available a more than ample supply of monetary gold. In other words, why use expensive silver as money when paper would do as well and cost less, since, in any case, both have to be "backed" by gold?

¹ For a further discussion of these monetary powers of the President, see pp. 95-97.

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and push up the price level if they are accompanied by an equal or larger increase in the demand as represented by the physical volume of goods and services

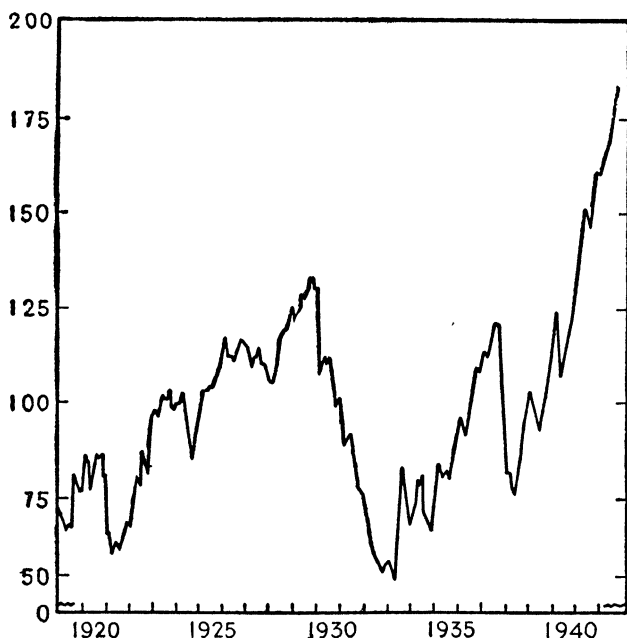


CHART II.—*Business Week* index of business activity, 1919–1942.
1923–1925 = 100

being bought and sold through the instrumentality of money and bank checks.

The demand for currency as represented by the physical volume of business done in the United States was high for a number of years, culminating with the crisis of 1929. It then dropped sharply until the period 1932 to 1933, after which it rose slowly, though

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with many small temporary reactions, until the slump of late 1937 and early 1938. Since 1938 and largely under the pressure of wartime demands, it has advanced rapidly, with a few slight interruptions, and is today (August, 1942) 75 per cent above the August, 1939, level. The chart on page 28 will give a general idea of this movement as portrayed by the index of business activity currently maintained by *Business Week*.

UNIQUE CHARACTER OF ECONOMIC ACTIVITY IN TIME OF WAR

While the expansion now taking place in the field of production is enormous, it does not constitute an increase in the monetary demand at all proportionate to its volume, for two obvious reasons: First, it represents a large and rapidly increasing shift from the production of "peace goods" to "war goods." The production of the former is curtailed to release labor, raw materials, and capital equipment for the latter. Second, the production and marketing of "war goods" makes a much smaller monetary demand, in proportion to its dollar value, than does the production of "peace goods." Most war goods go to one single consumer, the national government. Furthermore, production of these goods is for the most part on a very large scale—a substantial amount of it being undertaken by the government itself—and the routes of those war goods produced by private in-

dustry, from the producers of the raw materials, of the intermediate products, and of the final products to the ultimate consumer, are much shorter and more direct than in the case of the production of most "peace goods." The volume of sales, therefore, against money and bank checks is proportionately much smaller. Moreover, the large number of men enlisted in the armed forces of the nation make little monetary demand. Most of their food, clothing, and other necessary expenses are met directly by the government, and the amount of money these men spend directly is small in comparison to what they spend under peacetime conditions.

While the total currency demand may grow substantially under the pressure of an increased volume of business arising from war demands, the possibilities of its growth are not at all equal to those of the currency supply.¹

In our discussion of the causes of inflation, let us now turn our attention from the broad aspects of currency supply and currency demand to the prices of particular commodities and groups of commodities, namely, the prices that taken together constitute the price level.

¹ See pp. 11-27.

CHAPTER III

CAUSES OF INFLATION VIEWED FROM THE COMMODITY ANGLE

IT HAS been previously noted that, under inflation, price changes among different classes of goods and services are different in degree and very irregular in point of time. Some changes are small and some large, some respond to the inflation stimuli quickly, and some are long delayed.

PRICE CHANGES IN UNITED STATES DURING THE FIRST WORLD WAR

These principles are exemplified in the commodity-price changes that took place in the United States at the time of the First World War, as shown in the studies of the War Industries Board.¹ The studies cover the price movements of 1,437 commodities for the years 1913 to 1918 and use July 1, 1913, to June 30, 1914, as the base period.

The index number for all these commodities com-

¹ War Industries Board, *History of Prices during the War*, Price Bulletins 1 to 56. Figures cited on page 32 are quoted from the summary constituting Bulletin 1, prepared by Wesley C. Mitchell.

bined stood at 203 in December, 1918. Seven of the groups into which the commodities were classified, arranged from the lowest to the highest in the order of their respective price advances, were:

Rubber, paper, fibers	160
Building materials	179
Food	186
Chemicals	189
Fuel	196
Metals	211
Clothing	227

The similarities in the rates of price increases for such widely different classes of commodities are striking.

A like situation is found if one views the problem from the standpoint of individual commodities. Of the 1,437 commodities covered by the figures, 41 showed prices actually lower in 1918 than immediately before the First World War. At the other extreme, the prices of seven different commodities had been multiplied over eleven-fold, and those of 50 commodities, over fourfold. The great bulk of the commodities, however, showed price increases within the range of 50 to 150 per cent, the point of densest concentration having been 70 to 89 per cent. Of these figures the report said:¹ They "show clearly that there was, in fact, a mass movement of wholesale prices during the war with a fairly definite focus."

¹ *Ibid.*, p. 22.

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PRICE CHANGES IN THE UNITED STATES SINCE THE BEGINNING OF THE SECOND WORLD WAR

Since the Second World War began, in the late summer of 1939, the developments have had many characteristics analogous to those of the First World War. For the 28 basic commodities for which the Bureau of Labor Statistics compiles daily price index numbers, the advances from August, 1939, to August 14, 1942, have been as follows:

28 basic commodities	67.3
Imported commodities	62.8
Domestic commodities	70.2
Domestic agricultural commodities	84.4
Raw industrial commodities	53.3
Foodstuffs	87.7
Controlled commodities	61.4
Uncontrolled commodities	82.1

From August, 1939, to July, 1942, wholesale prices in general ¹ (889 commodities) rose 31 per cent, and representative large groups of commodities advanced as follows (to March, 1942):

Groups of Commodities	Percentage Advance
Raw materials	48
Farm products	64
Finished products	23
Semimanufactured products	24

While all smaller groups of commodities rose, as did nearly all individual commodities within the

¹ Bureau of Labor Statistics index number.

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groups, the extents of the advances were very different, in part due of course to governmental price fixing but in large part due to other conditions affecting the production of the commodities themselves and their respective markets.

Among the groups that showed the least advances were:

Groups of Commodities	Percentage Advance
Rayon	11
Chemicals	15
Agricultural implements	4
Cement	3

Among the groups that showed the greatest advances were:

Groups of Commodities	Percentage Advance
Grains	82
Hides and skins	51
Textile products	45

In considering these figures, it should be repeated that here, as in the latter period of the First World War, American prices were not the prices of a completely free market. In both periods they were greatly influenced by various types of governmental controls, which affected the prices of different commodities differently.¹

¹ See M. Jacobstein and H. Moulton, *Effects of the Defense Program on Prices, Wages, and Profits*, pp. 20-24. See also pp. 117-126.

REASONS FOR DIFFERENCES IN PRICE ADVANCES OF DIFFERENT COMMODITIES

Since the price of every commodity registers not only the value of the money in which it is expressed, but also the value of the commodity itself, and since the price can rise because the commodity is becoming relatively scarce or because money is becoming relatively plentiful or because both of these things are happening, it is important in any study of inflation to consider the question of the scarcity or abundance of individual commodities and groups of commodities. The subject is an enormous one, and it will be possible here to touch only a few of the high spots. Speaking broadly, the principal causes of commodity scarcity in a period of wartime inflation like the present may be grouped as those relating chiefly to (1) raw materials, (2) plant and equipment, (3) workers—including both labor and management, (4) consumers' goods in general.

1. RAW MATERIALS

One of the most obvious economic results of war is a greatly increased demand for those raw materials that are used both directly and indirectly in making the principal instruments of war. Prominent among them are such metals as iron, copper, nickel, aluminum, magnesium, and chromium, and also the

numerous chemicals that are used in the manufacture of modern explosives. Among the raw materials for which war causes a greatly increased demand are also coal, oil, gas, and all the other materials that are used in the manufacture of mechanical power; the rubber needed for tanks, trucks, and planes; the silk and nylon required for making parachutes; and the coconut fiber, cotton, and plastics needed for gas masks, and so on *ad infinitum*.

In time of war there are also likely to be shortages of many kinds of basic foodstuffs, not necessarily because more of them are consumed (although that may be the case since a much larger proportion of the people are leading physically active lives), but chiefly because production is greatly interfered with, through war ravages in the producing areas and the transportation lanes and because of the large-scale drafting into the military service of farmers, cattlemen, and other primary-food producers.

Many of the articles above mentioned come from abroad and have their production impaired by the war. Some are produced largely in enemy countries and in places that have fallen under enemy control, from which importation is no longer possible. Even from friendly countries and from neutrals exportation is likely to be governmentally controlled, while ocean-shipping facilities are often greatly restricted by the war on the high seas.

2. PLANT AND EQUIPMENT

The same principle applies to plant and equipment as to raw materials. Of these the nation has a limited supply, and this plant and equipment have been a matter of slow growth and have been adapted almost entirely to the production of peace products rather than of the implements of war. A sudden shift to a demand for an "all-out" production of war implements throws the manufacturing system out of equilibrium. We have altogether too much of some types of plant and equipment and altogether too little of others. In any modern capitalistic system of production, with its high specialization into many simplified processes, its interchangeable parts, and its great similarities of instruments for the production and transmission of power used in the making of different commodities, many shifts can be made from the production of peace goods to war goods quickly and at little expense. We read daily in the press of remarkable adjustments of this type,¹ as, for example,

¹ For a long list of such war products and of the peace products they are replacing, see *Business Week*, Feb. 28, 1942, p. 24. In this list one finds such items as the following:

Bomb fuses instead of costume jewelry.

Percussion caps instead of egg poachers.

Hubs for tanks instead of lawn mowers.

Naval gun sights instead of toy trains.

Incendiary bombs instead of oil filters.

Gun-mount plates instead of mayonnaise.

For our experience in the First World War in this connection, see B. Baruch, *American Industry in the War*, pp. 41 and 42.

the shift of the entire washer-ironer industry from civilian production to the manufacture of .50-caliber antiaircraft mounts.¹ Then there is the enormous shift of our automobile industry from the production of motor cars to the production of war implements. Illustrating this development, the *National City Bank Letter* of October, 1941, page 115, cites the following examples:

General Motors has undertaken or has under negotiation \$1.2 billion of defense contracts, against which deliveries totaled \$77,-700,000 in 1940, \$131,800,000 in the first six months of 1941, and will reach an estimated \$275,000,000 in the second six months. About half of the contracts are in the aircraft field. . . . Other important contracts are held for machine guns, rapid fire cannon, shells, cartridge cases, gun housings, and other ordnance items, Diesel units for naval use, and special types of military trucks. More than 70 per cent of the defense contracts are for products other than those normally manufactured by the corporation's divisions.

The work of the Chrysler Corporation was described by Mr. K. T. Keller, the President, in the corporation's semi-annual earnings report August 15 [1941] as follows:

" . . . Extensive equipment and tooling preparations are proceeding on an anti-aircraft cannon and Martin bomber fuselages and nose pieces. The corporation is further engaged in the development and manufacture of cargo ship propulsion machinery, full-sized experimental units of which will be delivered in the latter part of August. Our engineers are making satisfactory progress in the development of a 2,000-horsepower aviation engine. They are also developing a 500-horsepower liquid-cooled tank engine and have just completed the development of a new airplane landing-gear strut."

¹ *New York Herald Tribune*, Oct. 12, 1941.

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The Ford Motor Co. is not only completing a plant to make Pratt & Whitney motors, which is virtually ready for production, but in due time will be making 75 completed heavy bombers and sub-assemblies for 100 planes a month, in a new plant at Ypsilanti.

Packard is just bringing into production a plant for Rolls-Royce aircraft motors. Studebaker is preparing to make Wright Cyclone motors; Nash-Kelvinator is to turn out propellers; Hudson is completing a naval arsenal for ordnance production; and other automobile companies and parts and accessories manufacturers have a diversity of armament work.

Nonetheless, in many cases such shifts are not practical. New plants have to be built in the proper locations and have to be equipped largely with new types of machinery. There is an enormously increased demand for some kinds of plant and equipment while other kinds are being increasingly thrown out of use. In some lines production must be sped up very rapidly; in others there is more time. All sorts of bottlenecks are continually appearing. Such a situation makes for great differences in the price movements of different manufactured products.

3. WORKERS

In many respects the situation with regard to both labor and management is similar to that just described with regard to raw materials, plants, and equipment. The huge shift in demand from peace products to war products changes decidedly the economic picture of the demand for skilled labor. Some skills come suddenly into great demand, and others

fade out of the picture. In some skills men can be trained quickly, but in others the progress is slow. Here again there are numerous bottlenecks.

The drafting of large numbers of men into the armed forces of the nation lessens the supply of labor available for economic production, and this reduction in the supply is very unequal among different skills.

Then again there are great variations in the bargaining power of different kinds of labor and even of the same kinds in different localities. Some kinds of labor are highly organized, but other kinds have no organization at all. Between these two groups there is every possible gradation. The result is that in an inflationary situation the wages of some groups go up rapidly, often actually anticipating expected advances in the cost of living, while the wages of others lag far behind. The wages and salaries of different groups of employees, therefore, like the prices of different kinds of commodities, move unevenly under the impact of the forces of wartime inflation.

Advances in the price of raw materials and of labor force compensating advances in the prices of finished products, while advances in the price of finished products, by raising the cost of living, induce labor to demand compensating advances in wages. This is the so-called "inflation spiral." Once started, the advances tend to be cumulative and to move from industry to industry.

4. CONSUMERS' GOODS IN GENERAL

In time of war and threatened war the nation's economic forces, its labor, capital, and natural resources are increasingly directed to the production of the implements of war and the support of the armed forces. The supply of consumers' goods available for noncombatants accordingly tends to be progressively curtailed. At the same time the volume of wage payments increases under the pressure of war demands, through higher wage rates, fuller employment, and more overtime pay. Unlike the situation in times of peace, increased wage payments do not mean an increased supply of the goods for which the wages will be spent, but rather an ever-growing volume of war supplies in the hands of the government. The wage funds in the hands of workers grow rapidly while the supply of the kinds of goods workers want to buy shrinks. This so-called "inflation gap"¹ means a strong and growing competition for consumers' goods that tends to push up their prices as long as it continues.

¹ For a further discussion of the "inflation gap," see p. 152.

CHAPTER IV

INFLATION AND DEBTS

INFLATION has impacts on prices of all kinds—prices of commodities and securities—on wages, profits, rents, interest rates, taxes, exchange rates, and debts. It affects every institution of our economic life and, in its extreme form, acts as a powerful engine of wealth redistribution. It also often reduces production by stimulating wasteful speculation, destroying capital-building habits of economy and thrift, and in other ways distorting normal economic processes and breaking down moral standards.

In this and the following four chapters we shall consider the more important results of inflation, which, for convenience, may be grouped under the six rubrics: debts, interest rates, foreign trade, wages, social-welfare endowments, and democracy.

Probably the most important influences of inflation are exercised through the relations between debtor and creditor. Some of the more direct of these impacts will be the subject of this chapter.

Who are the debtors and who are the creditors? In answering these questions, the first fact to note is that most people are both debtor and creditor and that

it is impossible to divide them into two mutually exclusive classes. In some kinds of business this status of being both debtor and creditor is found on a large scale. A bank, for example, is a creditor to all its borrowers and to the obligors on all the bonds it owns, and it is a debtor to all its depositors. A similar situation obviously exists in the case of life insurance companies. On our national debt we are all debtors as taxpayers, and most of us are also creditors as government-bond holders.

The creditor class, in general, consists of the people and the institutions that own bonds, mortgages, notes, and other similar obligations. It includes the holders of 126 million life insurance policies, with a face value of \$118 billion, over 15 million depositors in our mutual-savings banks, with deposits of nearly \$11 billion, and over 29 million holders of savings and other time deposits in other banks, which amount to \$15½ billion. The creditor class includes also our universities, colleges, hospitals, libraries, educational, health, research, and other public-welfare institutions, with endowments running into billions of dollars, by far the greater part of which is invested in bonds and mortgages. It includes all holders of government debt, national, state, and local, and the scores of millions of beneficiaries of our Social Security laws.

Our life insurance companies, savings banks, and similar institutions have little choice as to whether they will invest their funds in bonds and mortgages

on the one hand or in so-called "equities" on the other. The trustee laws of our states and our banking laws, national and state, in a worthy effort to protect the beneficiaries of trust funds bring heavy pressure, and in many cases compulsion, upon these institutions to invest their funds chiefly in bonds and mortgages, and this pressure is enforced by a strong public opinion.

What happens to creditors under inflation? They receive payment of the debts due them, principal and interest, in a depreciated dollar. This means that the value of bonds, mortgages, and other debts declines *in terms of purchasing power* as the value of the dollar in which they are payable depreciates—in other words, as commodity prices rise. If, for example, the price level doubles, the value of the dollar is cut in half, and if the price level goes up fourfold the value of the dollar is cut to one-fourth.

In the study of the influence of inflation on the relationship between debtors and creditors, it is with long-time debts that we are most concerned. Except in cases of extreme inflation like those of Germany, Poland, Austria, and Russia after the close of the First World War, inflation is not of much importance in the case of short-time debts that are paid at maturity or of current book accounts that are paid promptly. For such debts the value of the monetary unit changes only slightly, if at all, during the short life of the obligation. For long-term debts, however, the story is very different.

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BONDS V. STOCKS

One of the principal forms of long-time debts in the United States today is the corporation bond. Here the creditors are the persons and institutions who own the bonds, and the debtors are, in effect, with limited liability, the owners of the corporations that issue them, that is, the stockholders. In 1940, the latest year for which figures are available, the volume of corporation long-term bonds outstanding in the United States was \$44 billion.¹

Because inflation tends to help debtors at the expense of creditors, it encourages investors to shift from credits to equities and particularly from bonds and mortgages to common stocks.²

Inflation raises the prices of the goods and services a corporation sells but does not directly³ increase the indebtedness. The corporation pays its debts, principal and interest, in cheapening dollars, which it tends to receive in ever-increasing volume as prices rise. The stockholders, as the owners of the corporation, therefore, tend to receive not only what would be naturally coming to them, but, in addition, what the bondholders, *i.e.*, the creditors, lose. The point

¹ U.S. Department of Commerce, *Survey of Current Business*, November, 1941, p. 21.

² Also to those few bonds and preferred stocks that are made convertible into common stocks. From this point of view, nonconvertible preferred stocks are usually more like credits than equities.

³ Through encouraging business concerns to tie up increasing funds in inventories at rising unit costs and increasing unit volume, as prices rise, inflation indirectly stimulates borrowing.

may be made clear by a simple hypothetical illustration.

Assume a corporation whose capital structure was \$10 million, of which \$2 million were in the form of long-time $4\frac{1}{2}$ per cent first-mortgage bonds, \$3 million in the form of long-time 6 per cent debentures, and the balance of \$5 million in the form of common stock. Assume that this corporation sold an industrial product which at wholesale brought a net price of \$1 to the corporation. Assume that the corporation was prosperous and that its earnings were ample to pay the service on the debt and a fair dividend on the common stock and to accumulate a modest surplus. Assume that the market price of its bonds was 100; that of the debentures, 80; and that of the common stock, 50.

With this situation in mind, assume that the country has experienced a strong inflation and that after a number of years the dollar has depreciated to one-fourth of its former purchasing power. This would mean that the commodity-price level had risen fourfold. With this rise in the price level, we shall assume that the product which the corporation produced has been increased in price from \$1 to \$4, that manufacturing and distributing costs have ultimately risen in the same proportion, and that the gross income of the corporation has likewise increased fourfold, with a corresponding increase in the dollar value of its capital equipment.

On these assumptions, while the corporation's debt

in terms of dollars would be the same as at the beginning, it would all now be payable in dollars possessing only 25 per cent of the purchasing power possessed by the dollars of the earlier period. The first-mortgage bonds would still be selling in the neighborhood of 100. The great increase in the income of the corporation would have "put it on Easy Street" as regards its debentures, and these would now have risen to, say, 90 or better, but they would likewise be payable in a "25-cent dollar." The corporation would be receiving four times as many dollars as it did in the early period, and the stockholders' income and property would be four times as large in terms of these less valuable dollars.¹ The stockholders, however, would receive in addition practically all that the bondholders and the debenture holders lost, because, as the owners of the corporation, they would be paying its entire five million dollars of indebtedness (principal and interest) virtually in 25-cent dollars. The common stock, therefore, would rise in price in terms of the inflation dollar much more than fourfold.

It is in anticipation of profits of this kind under prospects of inflation that the public tends to shift its investment demands away from the highest grade bonds and mortgages and from preferred stocks in

¹ It is assumed here that the depressing influence exercised on the security prices by a probable rise in market rates of interest will be more than offset by the influence of this large depreciation in the value of the dollar. See p. 48 and note 2.

favor of common stocks, real estate, and, to a smaller extent, the lower grade bonds.¹ This is called the shift from credits into equities.²

The fact should be emphasized that the above is a highly simplified illustration with figures chosen arbitrarily. In actual fact the developments in such a period might well be very different than here assumed. They would be complicated by great differences in the rates of advance in the prices of different commodities and in wages, by increasing governmental regulation and restrictions of business, by various kinds of "leakage," and by tax advances, which would tend to be increasingly progressive in their incidence³ and which might hit the stockholder harder than the bondholder. Furthermore, in times of serious inflation, it should be noted, governments sometimes enact laws that deliberately discriminate against stockholders and in favor of bondholders, as was done, for example, in Germany and Poland after the First World War.

¹ Low-grade bonds, though credit instruments, are often thought of as equities because of the wide range in which they can move before they reach the price at which they become payable. From the standpoint of income and excess-profits taxes, however, the interest they pay is in a different category from the dividends paid on common stocks, because to the corporation the interest is an item of expense, ranking before the taxes, while the dividends are a distribution of profits.

² During the French postwar inflation of 1919 to 1926, stocks in general fared much better than bonds. For interesting studies of the comparative movements during this period in France of exchange rates, commodity prices, and the prices of stocks and bonds, see Walter Blenk, *A Study of French Post-War Inflation and the Present American Situation*, pp. 44-55, and William F. Ogburn and William Jaffé, *The Economic Development of Post-War France*, pp. 84-90.

³ See pp. 88-89.

INFLATION AND DEBTS

For reasons like these it may well happen that at times in periods of inflation bonds may make a better showing than common stocks. As a general long-run proposition the price of a stock is the present value of the prospective-income yield of the stock capitalized at the market rate of interest. From this it follows that, no matter how much the dollar (in terms of which the value of the stock is quoted) depreciates, the price will be low if there is little or no net income in prospect to capitalize.

By way of illustrating the broad principle just discussed concerning the influence of inflation on debtor-and-creditor relationships, let us consider briefly its application to two types of institutions that deal extensively with debts, namely, banks and life insurance companies.

INFLATION AND THE BANKS

How will inflation, with its probable resulting advances in interest rates,¹ affect banks? Anything like an adequate answer to this question would require a voluminous discussion, because the forces of inflation have an almost infinite number of impacts upon the banking business. Some of them are unfavorable and some are favorable.

Before we consider the pros and cons, we should

¹ The influence of inflation on interest rates is discussed in the next chapter. Doubt is there expressed on the question of the ability of government effectively to control interest rates during a long period of inflation and immediately thereafter.

note the important fact that, as a class, bankers are less concerned with inflation than most other businessmen. Inflation helps debtors and hurts creditors. The banker, as previously noted, is both debtor and creditor on a large scale. His business is preeminently that of swapping his own noninterest-bearing debt for the other fellow's interest-bearing debt, *i.e.*, his noninterest-bearing demand deposit for the other fellow's interest-bearing note, bill, or bond. If we have serious inflation and the dollar greatly depreciates and thereupon the bank debtors pay the bank in a cheap dollar, the banker merely turns around and pays the same cheap dollar to his creditors—the depositors. One hand to a great extent washes the other.

DISADVANTAGES OF INFLATION TO THE BANKER

Some of the more important disadvantages of inflation to the banker are the following:

Depressed Security Prices as a Result of Advancing Interest Rates. Advances in interest rates usually accompany or follow substantial and long-continued rises in the price level.

Probably the outstanding change in American commercial banking during the present century has been the pronounced shift in banking portfolios from business paper to investment securities. This shift has been particularly pronounced since the First World War. It is the explanation of the statement one hears

so frequently nowadays that our commercial banks are rapidly becoming investment trusts, with assets consisting chiefly of capital securities (principally government debt) and with most liabilities to the public actually, or virtually, payable on demand.

For Dec. 31, 1941, the operating insured commercial banks of the United States reported total loans and investments of \$49.3 billion; of this sum \$28 billion or 57 per cent, consisted of securities and \$21.3 billion or 43 per cent, of loans, discounts, and overdrafts.¹ Of the securities 75 per cent consisted of United States Government obligations.² Because of the almost-vanishing yields of high-grade, short-time securities during recent years, the temptation to banks, particularly those in the smaller communities, has been strong to increase the proportion of their longer maturities where the yield, though low, is better.

The portfolios of the banks differ in one important respect from those of the customary type of investment trust, that is, in the fact that nearly all the securities owned are in the form of debt, namely, of bonds, mortgages, and short-time notes, and a very few are in the form of proprietorship claims such as common stocks. Under the federal law national banks are pro-

¹ Federal Deposit Insurance Corporation, *Annual Report*, 1941.

² On May 31, 1942, our commercial banks (5,780) and mutual savings banks (492) owned \$27.3 billion or 51 per cent of all national-government public-marketable interest-bearing securities. Of this amount, \$23.4 billion were securities with maturities exceeding 1 year and \$14.3 billion securities with maturities exceeding 5 years.—Treasury Department, *Bulletin*, July, 1942, p. 44.

hibited from investing in corporation stocks (with minor exceptions), and in most of our state jurisdictions there are either similar prohibitions or very rigid restrictions as regards such investments. Inasmuch as bank portfolios contain a large proportion of bonds with substantial maturities and as the market value of these bonds depends heavily upon the prevailing interest rates, the ups and downs of the market rates of interest are matters of great concern to bankers. As the interest rate increases with an enduring rising price level, the market prices of bonds will tend to decline, because their coupon rates will be capitalized at this rising market rate of interest. The longer the maturity of the bond, other things being equal, the greater will be the decline in the market price. A rise in the market rate of interest, for example, from $3\frac{1}{2}$ to $4\frac{1}{2}$ per cent would be expected to cause a decline of 8 per cent in the value of a bond due in 10 years (with interest payable semiannually) and of about 13 per cent in that of one due in 20 years.¹

The Case of Government Bonds. This principle will apply to government securities as well as to those of corporations. If it is argued that the government will maintain the market value of its bonds because it must conserve its credit and be prepared to continue to finance further deficits on favorable terms,

¹ In view of the large holdings of long-time government bonds by many of our banks, any advance in market rates of interest that should cause substantial declines in the prices of these bonds would obviously tend to reduce further the unduly low and recently declining ratios of capital funds to deposit liabilities of the banks.

the question arises, how can it do so? Unless it should adopt a policy of compelling the public to buy specified quotas of bonds or should refund its bonds at higher coupon rates, a process that would be costly and politically unpopular, the only recourse it would have would be, either directly or through agencies under its control, to buy the bonds at, or near, parity when they were offered for sale. The supply of long-time government bonds outstanding, however, is already enormous and is rapidly growing. While the government is continuing to run heavy deficits, it will have little or no money with which to buy in its bonds. For this purpose its stabilization fund of two billion dollars and its inactive gold supply would be inadequate. The stabilization fund is likely to be needed for other purposes. The government's old-age-pension reserve, if the policy of accumulating such a fund is continued, is still small and for the immediate future would not be sufficient for this purpose.

The only other recourse would be practically to monetize the bonds.¹ By monetizing the bonds I mean making them practically convertible on demand into bank notes or bank-deposit credit through the Federal Reserve banks and the member banks.

The mechanism might be for the Federal Reserve banks to buy in the open market all bonds offered to them at, or near, parity and to pay for them by Fed-

¹ This, as previously explained (pp. 17-18), was essentially the policy followed by Germany during and following the First World War.

eral Reserve notes, by Federal Reserve bank notes (the issuance of which could be administratively renewed), or by Federal Reserve deposit credit, the bonds in turn being the security for these notes and this deposit liability.

Another possible procedure would be for the government to restore to the national banks the old-time privilege of issuing national-bank notes against government bonds. In this case, also, the notes would be secured by the bonds, and the bonds would be payable in the notes.

Restrictive provisions of legal reserve requirements could be administratively suspended by authority of existing law under the plea of emergency conditions. This process would be strongly inflationary and would push up commodity prices to higher and higher levels. The government would be holding down the interest rates on its own securities by a process that would be expanding the currency and boosting commodity prices. The advance in commodity prices would carry up with it market rates of interest.

If the government should maintain the price of its long-term, low-couponed bonds in this way, the yield of these bonds would get progressively smaller in relation to the advancing yields of other high-grade, long-term bonds. Owners of these government bonds, except the banks that were in position to monetize them, would hasten to sell their bonds, as far as permissible, to government institutions or to

banks, in order to get the funds with which to buy other bonds that would give higher yields. In this way the government bonds would in time all be back in the hands of the government or in the hands of the banks that were monetizing them. This is essentially what happened in Germany at the time of the First World War. In our case the government bonds would be maintained at parity in a dollar of continually depreciating purchasing power; other high-grade bonds not having such government monetization support would decline in price; and commodity prices, prices of real estate, rents, wages, and prices of equity securities would tend to advance.

Such a policy of practical monetization of the public debt might well for a short time be the line of least political resistance for the government, but in the long run it would be a bad policy to follow, if the lessons of postwar inflation in Europe are valid.

Higher Interest Rates on Time Deposits. As inflation progressed and the market rate of interest moved upward, pressure would become increasingly strong on the part of the banks for authority to permit¹ them to return to the payment of higher interest rates on their time deposits. Without such pay-

¹ The Banking Act of 1933 prohibited payment of interest on demand deposits and contained provisions under authority of which the Board of Governors of the Federal Reserve System has since greatly reduced the legal maximum rates member banks can pay on time and savings deposits. These maximum rates have been made applicable also to insured nonmember banks. Many banks have since reduced their rates below the legal maxima.

ment they would be likely to experience heavy withdrawals of these deposits.

Increased Banking Activity and Administrative Expenses. Greater activity in the banks' business would require an increasing number of employees at continually higher wages, which would substantially raise administrative expenses.

With pronounced inflation, deposits tend to be very active. The ratios of loans to deposits rise. Credits between businessmen tend to decline because sellers demand cash payments and give for them good cash discounts in order to avoid the losses that would arise from delayed payments at times when the dollar is rapidly depreciating in value. To make cash payments, of course, buyers would resort increasingly to the banks for funds, but to avoid depreciation of their funds they would be likely to draw down their deposits more quickly than in normal times. This would mean a rising rate of deposit turnover.

ADVANTAGES OF INFLATION TO THE BANKER

Turning to the favorable side, that is, to the advantages that would tend to come to banks from inflation, we may note the following:

1. Increasing activity and increased dollar profits on the part of the business public would augment the volume of bankers' business loans, and banks would tend to be more truly commercial banks and less investment trusts than at present.

INFLATION AND DEBTS

2. Increased business activity and rising prices would tend to sweeten many sour loans and investments. Business failures would tend to be low during inflation, as would bank failures.

3. Bankers would receive higher interest rates than at present on their commercial loans and on their new investments.

On net balance, bankers would probably lose like most other classes in the community rather than gain during any extended period of substantial inflation. At least, that was the experience of most bankers during the period of inflation in Europe following the First World War, both in the countries of extreme inflation and in those of more moderate inflation.

For a time, growing activity might seem to constitute prosperity, but strong inflation usually ends in a collapse, the so-called "stabilization crisis." The hilarity of the night before is followed by the cold gray dawn of the morning after. Then values decline; many bankruptcies occur, and there is a period of stagnation and depression, during which stabilization at, or near, the *status quo* level is usually effected, and the slowly gathering forces of recovery gradually bring things back to normal.

INFLATION AND LIFE INSURANCE

Obviously, many of the principles just discussed concerning the application of inflation to banks apply

also to life insurance companies, which are both creditor and debtor on a large scale. Their assets consist chiefly of bonds, mortgages, and loans to policyholders, and their incomes consist chiefly of interest received on these securities and premiums paid by policyholders. Their liabilities consist for the most part of their outstanding policies, and their outgo consists principally of the payment of maturing policies.

From the standpoint of inflation, a noteworthy fact is that policyholders pay premiums in advance, usually over a substantial period of time, for protection that is given them in the form of a right to receive at the maturity of their policies certain sums of money. This money is supposed to provide the beneficiary with financial security against the vicissitudes incident to the death of the insured and against those incident to old age and sickness, and, in the case of endowment policies, often are supposed to provide the money for the education of the children of the insured.

The extent to which these objectives are to be realized obviously depends both upon the number of dollars the beneficiary is to receive and upon the purchasing power of these dollars. If, in taking out a policy, the insured estimates that the protection he wishes to give the beneficiary at the maturity of the policy is \$20,000, half of this protection will be lost in case the dollar depreciates 50 per cent in purchasing power by the time the beneficiary receives his

money. He will receive the \$20,000 called for in the policy, but it will buy only half the goods and services contemplated by the insured because the cost of living in the meantime will have doubled.

A period of continued inflation would mean that, although the dollars the insured was giving out in payment for the premiums on his policy were continually declining in purchasing power, the principal of the policy would be paid "at the end of the series of premium payments" and in the cheapest dollar of all.

The situation would obviously be much worse in the case of lump-sum payment for the purchase of a series of annuities. Here, in the case of a continuous inflation, the annuities would be paid for entirely in dollars of the maximum purchasing power, while the annuities would all be paid in dollars of a lower purchasing power, each payment being lower than that of the one preceding. Of course, the opposite would be true in a period of long-continued deflation.

The rise in market rates of interest accompanying or following the inflation, although decreasing the market value of the bonds and mortgages with long maturities in the insurance companies' portfolios, would increase the yield on new investments. This increased yield, in turn, would tend to benefit the policyholders by increasing their dividends.

Clearly, on net balance, the effect of a substantial and long-continued inflation on the holders of life insurance policies would be unfavorable.

CHAPTER V

INFLATION AND INTEREST RATES

CLOSELY connected with the subject of the effects of inflation on debtor-and-creditor relationships, in fact, an important part of it, is the subject of the effects of inflation on interest rates. This chapter will be devoted to a brief consideration of a few outstanding principles and historical facts in this complex and controversial field.

It is a fact of elementary economics that a market rate of interest consists of three elements, namely: (1) pure interest, or economic interest, as it is sometimes called; (2) a cost of administration, and (3) a cost for insurance.

Pure Interest. The essence of pure interest is the fact that the possession of an economic good today carries an advantage over the present right to possess the same good at some future date, in that the use of the article during the intervening period is valuable. It is worth rent, either to enjoy directly as in the case of consumption goods like a diamond ring or a house, or to use productively as in the case of productive goods like a tractor or a lathe. The rate of pure interest is, therefore, the annual rental price of

capital expressed in terms of a percentage of the capital sum, on the assumption that there is no risk involved and no charge for administration. This is a useful theoretical concept, and the reality is sometimes closely approached in actual life but never completely attained.

Cost of Administration. Every grade of money-lender from the pawnbroker to the large banker has his overhead and his current expenses to meet. The market interest rate paid by the borrower must, therefore, normally include an allowance adequate to cover these expenses, or the business will not be carried on.

Insurance. The insurance element in a market rate of interest is divided into two parts, first, a charge to cover the risk that the principal and interest of the loan will not be paid according to the terms of the loan contract, and, second, a charge to cover the risk that, being paid, they will be paid in a monetary unit of a different value than that of the one loaned. It is with the charge to cover this latter kind of risk that we are principally concerned in a study of the influence of inflation on the interest rate. In time of serious inflation this is the highly variable element in the interest rate, particularly the long-time rate.

DEPRECIATION AND THE INTEREST RATE

When the risk is high that the currency in which a loan is payable will depreciate rapidly during the life of the loan, this element of insurance in the market rate of interest becomes large. The real interest yield is reduced, destroyed, or maybe made a negative quantity by the depreciation in the purchasing power of the monetary unit in which both the principal and interest are payable.

In a free market or even in one that is moderately free, periods of pronounced monetary inflation, after the inflation once gets under full swing, are usually periods of high and rising interest rates.¹ People with capital are unwilling to lend it except at high rates of interest when they expect that the loan will be repaid in a much less valuable dollar than the one that they are lending. Borrowers, on the other hand, are willing to pay high interest rates to obtain funds when the prospects are that they can invest the borrowed money in goods with prices that are rising rapidly and that they can pay back their debts ultimately in a much less valuable dollar than they borrowed.

During the inflation experiences, following the First World War, of Germany, Poland, Austria, and other inflation countries of Europe, interest rates often rose to great heights as commodity prices shot

¹ On this general subject see Irving Fisher, *The Theory of Interest*, Chap. XIX.

INFLATION AND INTEREST RATES

upward. A good illustration, though an extreme one, is cited by Dr. E. Gebhardt¹ of Berlin. Writing of his experiences with inflation in Germany while he was a student at the University of Berlin, he says that he made money by trading in cigarettes:

The cigarette prices were changed every noon according to the dollar quotations at the Berlin Stock Exchange. It was therefore possible to buy cigarettes in the forenoon and to sell them in the afternoon and to buy with the profit such goods of which the price was not increased in the afternoon. Those goods were especially food stuffs and such goods for which a maximum price decree was issued. I had borrowed my working capital at an interest rate of 30% daily but since the prices increased faster than 30% per day I could meet my small demands with the returns of my trading.

RISING PRICES STIMULATE DEMAND FOR CAPITAL

During the early part of a strong inflationary movement interest rates are often *temporarily* depressed.² The market is then being glutted with money and deposit currency.

After such a temporary period of currency glut and of resulting low interest rates, gradually the increased supply of money and deposit currency makes itself felt in rising prices. At such a time the velocities of monetary and bank-deposit circulation are increased. Then, when commodity prices once get into full swing on the rise, they pull up with them the interest rates. Everyone wants to buy today because

¹ *When the Clock Stopped in Germany*, pp. 13-14.

² See p. 13, note.

things are going to be dearer tomorrow. The housewife stores supplies, the merchant wishes to increase his inventory, the manufacturer to increase his stock of raw materials and improve his plant, and the home builder to build his home. A strong seller's market is created. This gives an artificial and feverish stimulus to business, greatly increases the demand for capital of all kinds, and pushes up interest rates.¹ It is largely for such reasons that, historically speaking, the level of interest rates and the level of commodity prices so often show the same general trend, moving up together in times of serious inflation and declining together in times of serious deflation. This conclusion is well supported by the chart on page 65, covering British experience² for over a century and a half.

The glut of money and deposit currency due to inflationary forces is soon absorbed in higher prices when the resulting upward movement of prices gets into full swing. At this time (August, 1942) in the United States we have entered upon a period of rising commodity prices. Despite our recent efforts at price control, our commodity-price level is advancing. The Bureau of Labor Statistics price index number for 28 basic commodities, for example, rose 67 per cent from August, 1939, to August 14, 1942, and five-sixths of this rise has been since October, 1940.

¹ See E. W. Kemmerer, "Trends in Interest Rates," an address before the American Finance Conference, 1936, also *The War and the Rate of Interest*, *American Economic Review*, Supplement, March, 1919, pp. 99-107.

² British commodity prices are a combination of the Silberling, Sauerbeck, and *Statist* index numbers.

INFLATION AND INTEREST RATES

The inflationary forces that will exercise a strong upward push on the price level have not yet reached their maximum, and we are now apparently just

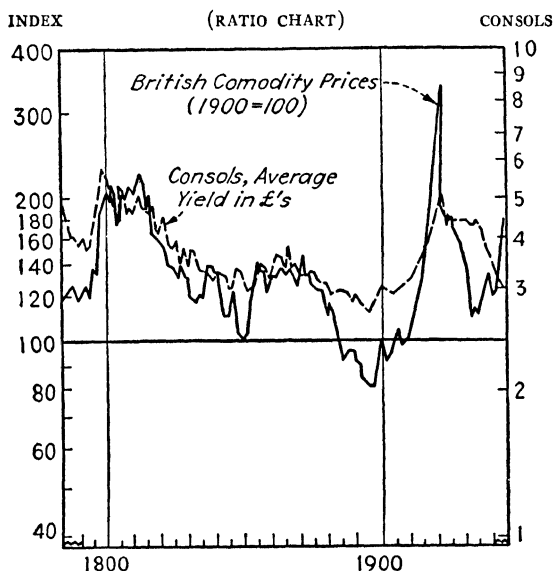


CHART III.—Yield of British consols compared with British commodity prices, 1785–1941.

emerging from a temporary period of monetary and credit glut¹ and resulting low interest rates into a period of strongly rising prices² and probably also

¹ Excess bank reserves have been tending strongly downward since early 1941, and, since August, 1941, deposit velocities in 101 leading cities have reversed their long downward trend and have recently been slowly advancing.

² For some time the government has been putting into effect progressively stronger price-control measures, which are discussed in the last four chapters of this book. How effective they will prove to be in curbing existing powerful inflationary forces, time alone will tell.

THE A B C OF INFLATION

of rising interest rates. When an upward price movement of this kind once gets considerable momentum in a time of war, it is likely to take up quickly any existing slack in the currency supply.

The present situation is in some respects like that of the year 1915, when interest rates were low because of the temporary redundancy of currency in the United States due to the establishment of the Federal Reserve System, before the First World War upward movement of commodity prices had got into swing. The 1914 to 1922 situation is shown by the following chart.

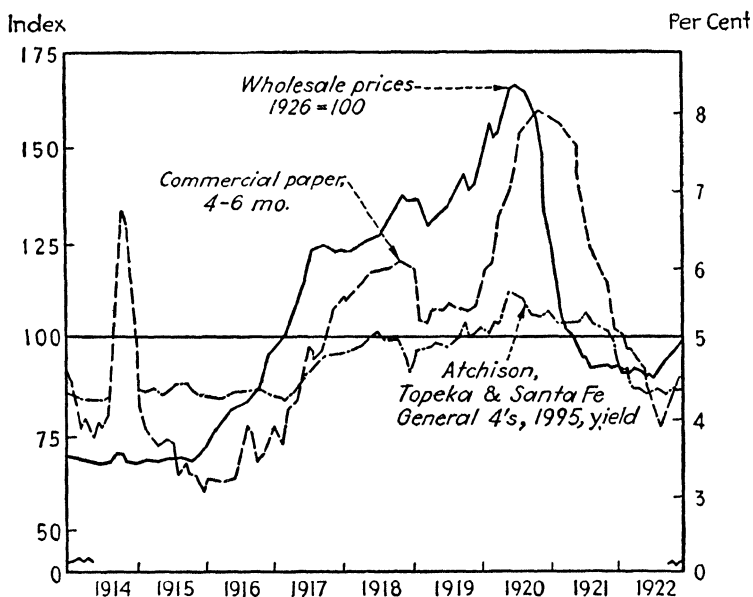


CHART IV.—Wholesale price level and the interest rate, 1914-1922.

THE FUTURE

As to the future of interest rates in the United States, I have no forecasts to make. Even in times of peace prophecies in the field of economics are dangerous. They are exceedingly so at a time of a world war like the present, when economic forces are so strongly dominated by military and political forces. At such a time we should replace our modern word *economics* by the good old term *political economy* and should spell the word *economy* in small black letters and the word *political* in capital letters of flaming red.

Interest rates in the United States have ruled at extremely low levels since the beginning of the long depression following the crisis of 1929 to 1933. At the present time (August, 1942) they show signs of stiffening. Both the experiences of history and the teachings of orthodox economic theory would forecast rising interest rates in the United States in times like these. Rates, however, in the United States since the war began in Europe in the summer of 1939 have continued at approximately the low level previously prevailing. During the First World War and for a few years immediately following, government efforts to hold down interest rates in the United States, as we have just seen, were not eminently successful.¹ At that time and since, however, we have learned

¹ Cf. Kemmerer, *High Prices and Deflation*, pp. 21-25.

useful lessons in the field of governmental economic controls, and it may be that we have at last evolved the technique for maintaining low interest rates by governmental action in situations like these. Even if that should prove true, we should still face the danger that prices and interest rates might run amuck after the war, as they did in several countries after the moderately effective controls, which were in force during the First World War, were lifted.

“Prophecy,” said an unknown writer long ago, “is the most gratuitous form of mistake.” We shall accordingly refrain.

CHAPTER VI

INFLATION AND FOREIGN TRADE

INFLATION BENEFITS THE EXPORT TRADE

IT IS a generally recognized principle, but not an entirely unchallenged one, that exports will be stimulated and imports retarded if a country's monetary unit depreciates under the pressure of inflationary forces so that along with rising commodity prices at home there is an even more rapid rise in the country's foreign-exchange rates.¹ These rates may be properly looked upon as one variety of price. They are the highly sensitive prices at home of foreign monetary units abroad, as, for example, the number of dollars in New York required to buy a pound in London or the number of cents in New York required to buy a peso in Buenos Aires.

The principle may be illustrated by a hypothetical case based on American happenings at the time we went off the gold standard, early in 1933, when within less than a year the gold value of our dollar

¹ Cf. E. W. Kemmerer, *Modern Currency Reforms*, pp. 479-483 and references there cited.

depreciated 41 per cent, and its purchasing power in the United States depreciated about 16 per cent.

If a shipment of raw cotton had been made from the United States to France in February, 1933, at a cost to the French purchaser of 100,000 gold francs, with exchange at 3.9 cents to the franc, the gross yield to the American exporter would have been \$3,900. One year later, on Feb. 3, 1934, after we had reduced the gold content of our dollar to 59 cents, the exchange rate in New York on Paris was approximately 6.3 cents to the franc. Therefore, at that time the same shipment of cotton, if it were sold at the same price in France, again yielding 100,000 gold francs, would have yielded the American exporter approximately the gross sum of \$6,300 instead of the former \$3,900, or an increase of \$2,400. This extra profit would have been due to the rise in the exchange, caused in this instance by the depreciation in the value of the American paper dollar, for there was no appreciable change in the world value or the purchasing power in France of gold during this period. Inasmuch as wages in the cotton fields and other items in the cost of producing cotton in the United States advanced much more slowly when the gold value of the dollar depreciated than did the dollar price of French exchange, this reduction in the gold content of the dollar yielded a temporary gain to the cotton merchant and exporter.¹

¹The fact should be noted, parenthetically, that if the dollar were depreciating in terms of the franc and if the public were expecting a

INFLATION HURTS THE IMPORT TRADE

Although, as in this example, a depreciating exchange may yield temporary benefits to some export interests, as a general proposition and as a basis of national monetary and foreign-trade policy, the argument that inflation is desirable because it stimulates a country's export trade is fundamentally unsound. This can be readily shown by following the argument through to some of its logical consequences.

Returning to the dollar-franc illustration, it is evident that the same depreciation of the dollar that was profitable to the cotton exporter tended to cut into the profits of American importers and to reduce our imports from France. The change in the New York-Paris exchange rate from 3.9 to 6.3 cents to the franc meant that any American importer buying 100,000 francs' worth of goods, say, for example, silk, in France had to pay \$6,300 now to buy his 100,000 francs, which was an advance of \$2,400, or of 61 per cent, over what he had had to pay the year before. Of course, in the meantime the price of silk in the United States did not rise by anything like this amount. Such an advance, therefore, cut deeply

continuing depreciation, this expectation might in some cases lead exporters deliberately to delay their exports in anticipation of still more favorable exchange rates.

On the other hand, it might speed up importations of some commodities, because importers seeing exchange rates becoming progressively more unfavorable to them might want to hurry imports before the bad exchange situation should become even worse.

into the profits of importers and tended greatly to raise the prices and reduce the volume of our imports.¹ Furthermore, many imported articles are raw materials that enter into the production of articles for export, and their advance in price is a handicap to our export trade.

INFLATION AS A POLICY FOR STIMULATING A NATION'S FOREIGN TRADE

The fundamental economic fact is that there is no more and no less virtue in \$1,000 of exports than there is in \$1,000 of imports and that all foreign trade is essentially barter. Using the terms *export* and *import* in their broad economic sense to cover, in addition to commodities, all items of invisible trade such as services, securities, and travel, we may say that a country which continually exported more than it imported would be giving goods away to foreigners and one that continually imported more than it exported would be receiving goods from foreigners for nothing. Gold itself moves in international trade for the same fundamental reason that anything else moves, namely, to earn a profit for someone by moving from the place where it is cheap to the place where it is dearer. A gold-standard country is normally harmed rather than benefited on balance if in exchange for its merchandise exports it receives more monetary gold than it needs for effectively maintain-

¹ See footnote, p. 70.

ing its price level in equilibrium with the price levels of other gold-standard countries. Such a country has a needlessly expensive monetary system. It has too much of its wealth in the form of monetary gold. It is "gold poor."

For a nation to adopt an inflationary policy of continually depreciating the value of its monetary unit in order to stimulate exports and retard imports would be an economic absurdity. It is only by *continually* depreciating our dollar that we could expect in this way continually to stimulate our export trade, and the logical limit to such a policy would be for the country to give up all its goods and have nothing but gold left.

Such stimulus to export trade is usually largely at the expense of labor and of the producers of raw materials. The exporter temporarily benefits by reason of the fact that the wages he pays and the prices he pays for his raw materials usually do not advance as rapidly as does the dollar price of the foreign money he receives for his exports. Under such conditions, moreover, the wages of the laborer and the pay received by the producer of raw materials in most cases advance much less rapidly than does their cost of living. The exporter gains by reason of this lag in price and wage adjustments at home, but, as soon as the slack is taken up, the exporter's advantage disappears.

FOREIGN RESISTANCES AGAINST EXCHANGE DUMPING

A second serious obstacle to attempts to stimulate trade by depreciating the currency is found in the powerful resistances that foreign countries naturally set up against the carrying out of such a policy. "Exchange dumping," so-called, is everywhere unpopular. Foreigners do not like to have their home industries broken down and their customary trade channels destroyed by an artificially stimulated importation into their country of cheap foreign goods, an importation which they rightfully believe will be but temporary. Such "exchange-dumping" competition creates bitter international animosities and causes foreign countries to set up powerful resistances. It was in part, at least, for the purpose of protecting themselves from such exchange dumping that in the depression year 1932 sixty-five commercially important countries increased by various means the barriers they set up against import trade—barriers in the form of tariffs, quotas, exchange restrictions, antidumping regulations, arbitrary customs regulations, bilateral barter agreements, and the like.

EXCHANGE WARS

A third objection to such a policy of artificially stimulating exports through inflation is the fact that

it causes international exchange wars. If one country can play that game, so can all its competitors. The logical result of such a development would be widespread international competition in currency inflation, which would mean chaos in world foreign trade and in international finance.

CREATION OF UNECONOMIC VESTED INTERESTS

A fourth serious objection to attempting to stimulate export trade through currency depreciation is the fact that such a policy establishes powerful vested interests that work for continued trade restrictions and, therefore, against world economic efficiency. A depreciating dollar, we have found, acts like a government bounty in the stimulation of export trade and like a tariff in the obstruction of import trade. These influences continue only as long as the currency continues to depreciate in terms of the money of the foreign countries with which the nation carries on business. As soon as prices and wages have become fully adjusted to the new level represented by the depreciated dollar, these forces cease to operate. But the uneconomic industries that have in the meantime been built up under this protection demand further government assistance to enable them to keep going after this temporarily depreciating exchange support ceases to operate. This is the source of many of the demands on the part of vested interests for bounties

and higher protective tariffs that follow periods of monetary depreciation.

The world-wide movement for higher tariffs, increasing trade restrictions, and greater economic nationalism that followed the First World War was in no small degree due to the pressure of vested interests of this general type that were set up during the war. The world suffered from them thereafter until all foreign trade was again violently disrupted by the Second World War.

CHAPTER VII

INFLATION AND WAGES

INFLATION when it reaches substantial proportions usually has important effects on real wages. While in times of inflation money wages in most cases rise when commodity prices rise, in nearly all periods of inflation for which good records are available the advance in the general money-wage level has begun later than the advance in the general price level and has lagged behind the latter either throughout the entire period of the inflation or until near the end of the period, when the inflation took an extreme form.

Of course, as previously noted in the case of commodities, the wages of different classes of labor and of different laborers in each class respond differently to the impact of inflationary forces. Inflation, for example, often occurs in time of war, and at such a time the wages in essential war industries tend to rise more rapidly than in other industries. Wages may, in fact, actually fall at such times in industries that are seriously depressed by the war.

Since rising prices stimulate business activity, labor in times of inflation is commonly more fully employed and employed for longer hours, an em-

ployment that frequently involves substantial overtime rates for excess hours, so that money incomes of workers usually increase faster than hourly wage rates.

As labor becomes more fully and more effectively organized in any industry, the lag in the adjustment of wages to increases in the cost of living tends to be shortened and, in some industries in which labor is very highly organized, wage advances may even be obtained in response to demands based on prospects, or alleged prospects, of advances in the cost of living—a phenomenon being witnessed in the United States at this writing.¹

Exemplifying the broad generalizations just given, a few significant experiences may be cited:

HISTORICAL RETROSPECT

Summarizing his conclusions on wage changes during the period of the American Civil War, Wesley C. Mitchell said: ²

All of the statistical evidence that has been presented in the preceding pages supports unequivocally the common theory that per-

¹ From the outbreak of the Second World War, August, 1939, to the present time (August, 1942), the price index prepared by the Bureau of Labor Statistics for the wholesale prices of 889 commodities has increased 31 per cent and that for 28 basic commodities has increased 67 per cent. During approximately the same time the cost-of-living index number of the National Industrial Conference Board has increased by 16 per cent, and the average weekly earnings in 25 manufacturing industries have increased by 42 per cent. Real weekly wages in these 25 manufacturing industries have increased 23 per cent.

² *History of Greenbacks*, pp. 347-348.

INFLATION AND WAGES

sons whose incomes are derived from wages suffer seriously from a depreciation of the currency. . . . While labor organizations had not yet attained their present power, manual laborers did not fail to avail themselves of the help of concerted action in the attempt to secure more pay. Strikes were frequent. All these facts favored a speedy readjustment of money wages to correspond with changed prices. But more than all else, a very considerable part of the labor supply was withdrawn from the market into the army and navy . . . [a part estimated at] about one-seventh of the labor supply. . . . But despite all these favoring circumstances, the men who stayed at home did not succeed in obtaining an advance in pay at all commensurate with the increase in living expenses.¹

Another significant illustration is that of Germany during the period of the First World War and the years immediately following.² Then the wages of skilled labor lagged behind the cost of living until the late summer of 1923, when they nearly caught up. By the end of that year the real wages of this group were only a little over half what they were in 1913. Unskilled labor fared much better than skilled labor. Here wages and the cost of living advanced at about the same rate during 1921 and 1922. Satisfactory data are not available for the movements of wages and the cost of living during the period of the First World War in other important belligerent countries of Europe.

Unfortunately, we have no comprehensive statis-

¹ A chart showing wage changes in relation to the cost of living during the period 1860 to 1880 is given by Mitchell in his *Gold, Prices and Wages under the Greenback Standard*, p. 244.

² Cf., E. W. Kemmerer, *Money*, p. 294, also C. Bresciani-Turroni, *Economics of Inflation*, pp. 305-306.

tics that are satisfactory for wages in the United States for the period of the First World War and the years immediately after. There are, however, some real-wage statistics of a general character covering this period that are valuable and significant. I refer to those prepared by Paul Douglas¹ and to the subsequent elaborations and interpretations of the Douglas figures by Millis and Montgomery.² For the period 1914 to 1920 some of the more significant of these figures, adjusted to a 1914 base, are given in the table on page 81, together with the wholesale-price indexes and the cost-of-living indexes of the Bureau of Labor Statistics.

The figures show that, although labor in general gained slightly in real wages per hour (column 3) during the war and early postwar period, it experienced practically no change in real full-time weekly earnings (column 4). The table shows also that, while some classes of labor made substantial gains, as, for example, coal miners and unskilled laborers, other classes suffered severely, notably government employees, ministers, and teachers.

WAGES DURING THE SECOND WORLD WAR

From August, 1939, which may be taken as the beginning of the Second World War, to the present

¹ See Paul Douglas, *Real Wages in the United States*.

² Harry A. Millis and Royal E. Montgomery, *Labor's Progress and Some Basic Labor Problems*, pp. 90-104.

WHOLESALE PRICES, WAGES, COST OF LIVING, 1914 TO 1920
(1914 = 100)

Date	Wholesale ¹ prices	Cost of living ²	Real hourly ³ earnings, all industries	Real weekly ⁴ earnings, all industries	Real earnings, ⁵ building trades	Real earnings, ⁶ farm laborers	Real earnings, ⁷ unskilled labor
1914	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1915	102.1	101.1	103.0	104.0	103.0	103.0	105.0
1916	125.5	109.6	103.0	104.0	98.0	103.0	107.0
1917	172.5	129.4	97.0	98.0	87.0	107.0	108.0
1918	192.8	149.9	99.0	100.0	79.0	110.0	121.0
1919	203.5	172.6	101.0	101.0	78.0	113.0	119.0
1920	226.7	199.4	105.0	103.0	87.0	112.0	112.0

Date	Real earnings, ⁸ manufacturing industries	Real earnings, ⁹ public-utility industry	Real earnings, ¹⁰ coal miners	Real earnings, ¹¹ government employees	Real earnings, ¹² postal employees	Real earnings, ¹³ teachers	Real earnings, ¹⁴ ministers
1914	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1915	100.0	104.0	110.0	103.0	102.0	104.0	107.0
1916	105.0	101.0	123.0	99.0	95.0	100.0	101.0
1917	104.0	96.0	137.0	88.0	81.0	89.0	89.0
1918	108.0	109.0	142.0	77.0	74.0	78.0	81.0
1919	112.0	105.0	118.0	75.0	78.0	81.0	74.0
1920	114.0	107.0	127.0	70.0	77.0	81.0	74.0

¹ Bureau of Labor Statistics, 889 commodities.

² Bureau of Labor Statistics.

³ Paul Douglas, *Real Wages in the United States, 1890-1926*, Table 73, p. 205.

⁴ *Ibid.*, Table 77, p. 211.

⁵ *Ibid.*, Table 41, p. 137.

⁶ *Ibid.*, Table 63, p. 187.

⁷ *Ibid.*, Table 88, p. 246.

⁸ *Ibid.*, Table 141, p. 378.

⁹ *Ibid.*, Table 126, p. 339.

¹⁰ *Ibid.*, Table 131, p. 353.

¹¹ *Ibid.*, Table 144, p. 386.

¹² *Ibid.*, Table 141, p. 378.

¹³ *Ibid.*, Table 142, p. 382.

¹⁴ *Ibid.*, Table 144, p. 386.

¹⁵ *Ibid.*, Table 140, p. 376.

¹⁶ *Ibid.*, Table 61, p. 182.

¹⁷ *Ibid.*, Table 140, p. 376.

¹⁸ *Ibid.*, Table 140, p. 376.

¹⁹ *Ibid.*, Table 140, p. 376.

²⁰ *Ibid.*, Table 140, p. 376.

²¹ *Ibid.*, Table 140, p. 376.

²² *Ibid.*, Table 140, p. 376.

²³ *Ibid.*, Table 140, p. 376.

²⁴ *Ibid.*, Table 140, p. 376.

²⁵ *Ibid.*, Table 140, p. 376.

²⁶ *Ibid.*, Table 140, p. 376.

²⁷ *Ibid.*, Table 140, p. 376.

²⁸ *Ibid.*, Table 140, p. 376.

²⁹ *Ibid.*, Table 140, p. 376.

³⁰ *Ibid.*, Table 140, p. 376.

³¹ *Ibid.*, Table 140, p. 376.

³² *Ibid.*, Table 140, p. 376.

³³ *Ibid.*, Table 140, p. 376.

³⁴ *Ibid.*, Table 140, p. 376.

³⁵ *Ibid.*, Table 140, p. 376.

³⁶ *Ibid.*, Table 140, p. 376.

³⁷ *Ibid.*, Table 140, p. 376.

³⁸ *Ibid.*, Table 140, p. 376.

³⁹ *Ibid.*, Table 140, p. 376.

⁴⁰ *Ibid.*, Table 140, p. 376.

⁴¹ *Ibid.*, Table 140, p. 376.

⁴² *Ibid.*, Table 140, p. 376.

⁴³ *Ibid.*, Table 140, p. 376.

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⁴⁷ *Ibid.*, Table 140, p. 376.

⁴⁸ *Ibid.*, Table 140, p. 376.

⁴⁹ *Ibid.*, Table 140, p. 376.

⁵⁰ *Ibid.*, Table 140, p. 376.

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⁵⁵ *Ibid.*, Table 140, p. 376.

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⁵⁸ *Ibid.*, Table 140, p. 376.

⁵⁹ *Ibid.*, Table 140, p. 376.

⁶⁰ *Ibid.*, Table 140, p. 376.

⁶¹ *Ibid.*, Table 140, p. 376.

⁶² *Ibid.*, Table 140, p. 376.

⁶³ *Ibid.*, Table 140, p. 376.

⁶⁴ *Ibid.*, Table 140, p. 376.

⁶⁵ *Ibid.*, Table 140, p. 376.

⁶⁶ *Ibid.*, Table 140, p. 376.

⁶⁷ *Ibid.*, Table 140, p. 376.

⁶⁸ *Ibid.*, Table 140, p. 376.

⁶⁹ *Ibid.*, Table 140, p. 376.

⁷⁰ *Ibid.*, Table 140, p. 376.

⁷¹ *Ibid.*, Table 140, p. 376.

⁷² *Ibid.*, Table 140, p. 376.

⁷³ *Ibid.*, Table 140, p. 376.

⁷⁴ *Ibid.*, Table 140, p. 376.

⁷⁵ *Ibid.*, Table 140, p. 376.

⁷⁶ *Ibid.*, Table 140, p. 376.

⁷⁷ *Ibid.*, Table 140, p. 376.

⁷⁸ *Ibid.*, Table 140, p. 376.

⁷⁹ *Ibid.*, Table 140, p. 376.

⁸⁰ *Ibid.*, Table 140, p. 376.

⁸¹ *Ibid.*, Table 140, p. 376.

⁸² *Ibid.*, Table 140, p. 376.

⁸³ *Ibid.*, Table 140, p. 376.

⁸⁴ *Ibid.*, Table 140, p. 376.

⁸⁵ *Ibid.*, Table 140, p. 376.

⁸⁶ *Ibid.*, Table 140, p. 376.

⁸⁷ *Ibid.*, Table 140, p. 376.

⁸⁸ *Ibid.*, Table 140, p. 376.

⁸⁹ *Ibid.*, Table 140, p. 376.

⁹⁰ *Ibid.*, Table 140, p. 376.

⁹¹ *Ibid.*, Table 140, p. 376.

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⁹³ *Ibid.*, Table 140, p. 376.

⁹⁴ *Ibid.*, Table 140, p. 376.

⁹⁵ *Ibid.*, Table 140, p. 376.

⁹⁶ *Ibid.*, Table 140, p. 376.

⁹⁷ *Ibid.*, Table 140, p. 376.

⁹⁸ *Ibid.*, Table 140, p. 376.

⁹⁹ *Ibid.*, Table 140, p. 376.

¹⁰⁰ *Ibid.*, Table 140, p. 376.

¹⁰¹ *Ibid.*, Table 140, p. 376.

¹⁰² *Ibid.*, Table 140, p. 376.

¹⁰³ *Ibid.*, Table 140, p. 376.

¹⁰⁴ *Ibid.*, Table 140, p. 376.

¹⁰⁵ *Ibid.*, Table 140, p. 376.

¹⁰⁶ *Ibid.*, Table 140, p. 376.

¹⁰⁷ *Ibid.*, Table 140, p. 376.

¹⁰⁸ *Ibid.*, Table 140, p. 376.

¹⁰⁹ *Ibid.*, Table 140, p. 376.

¹¹⁰ *Ibid.*, Table 140, p. 376.

¹¹¹ *Ibid.*, Table 140, p. 376.

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¹¹³ *Ibid.*, Table 140, p. 376.

¹¹⁴ *Ibid.*, Table 140, p. 376.

¹¹⁵ *Ibid.*, Table 140, p. 376.

¹¹⁶ *Ibid.*, Table 140, p. 376.

¹¹⁷ *Ibid.*, Table 140, p. 376.

¹¹⁸ *Ibid.*, Table 140, p. 376.

¹¹⁹ *Ibid.*, Table 140, p. 376.

¹²⁰ *Ibid.*, Table 140, p. 376.

¹²¹ *Ibid.*, Table 140, p. 376.

¹²² *Ibid.*, Table 140, p. 376.

¹²³ *Ibid.*, Table 140, p. 376.

¹²⁴ *Ibid.*, Table 140, p. 376.

¹²⁵ *Ibid.*, Table 140, p. 376.

¹²⁶ *Ibid.*, Table 140, p. 376.

¹²⁷ *Ibid.*, Table 140, p. 376.

¹²⁸ *Ibid.*, Table 140, p. 376.

¹²⁹ *Ibid.*, Table 140, p. 376.

¹³⁰ *Ibid.*, Table 140, p. 376.

¹³¹ *Ibid.*, Table 140, p. 376.

¹³² *Ibid.*, Table 140, p. 376.

¹³³ *Ibid.*, Table 140, p. 376.

¹³⁴ *Ibid.*, Table 140, p. 376.

¹³⁵ *Ibid.*, Table 140, p. 376.

¹³⁶ *Ibid.*, Table 140, p. 376.

¹³⁷ *Ibid.*, Table 140, p. 376.

¹³⁸ *Ibid.*, Table 140, p. 376.

¹³⁹ *Ibid.*, Table 140, p. 376.

¹⁴⁰ *Ibid.*, Table 140, p. 376.

¹⁴¹ *Ibid.*, Table 140, p. 376.

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¹⁴³ *Ibid.*, Table 140, p. 376.

¹⁴⁴ *Ibid.*, Table 140, p. 376.

¹⁴⁵ *Ibid.*, Table 140, p. 376.

¹⁴⁶ *Ibid.*, Table 140, p. 376.

¹⁴⁷ *Ibid.*, Table 140, p. 376.

¹⁴⁸ *Ibid.*, Table 140, p. 376.

¹⁴⁹ *Ibid.*, Table 140, p. 376.

¹⁵⁰ *Ibid.*, Table 140, p. 376.

¹⁵¹ *Ibid.*, Table 140, p. 376.

¹⁵² *Ibid.*, Table 140, p. 376.

¹⁵³ *Ibid.*, Table 140, p. 376.

¹⁵⁴ *Ibid.*, Table 140, p. 376.

¹⁵⁵ *Ibid.*, Table 140, p. 376.

¹⁵⁶ *Ibid.*, Table 140, p. 376.

¹⁵⁷ *Ibid.*, Table 140, p. 376.

¹⁵⁸ *Ibid.*, Table 140, p. 376.

¹⁵⁹ *Ibid.*, Table 140, p. 376.

¹⁶⁰ *Ibid.*, Table 140, p. 376.

¹⁶¹ *Ibid.*, Table 140, p. 376.

¹⁶² *Ibid.*, Table 140, p. 376.

¹⁶³ *Ibid.*, Table 140, p. 376.

¹⁶⁴ *Ibid.*, Table 140, p. 376.

¹⁶⁵ *Ibid.*, Table 140, p. 376.

¹⁶⁶ *Ibid.*, Table 140, p. 376.

¹⁶⁷ *Ibid.*, Table 140, p. 376.

¹⁶⁸ *Ibid.*, Table 140, p. 376.

¹⁶⁹ *Ibid.*, Table 140, p. 376.

¹⁷⁰ *Ibid.*, Table 140, p. 376.

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time, the movements by months in the United States of wholesale prices, the cost of living, and wages in

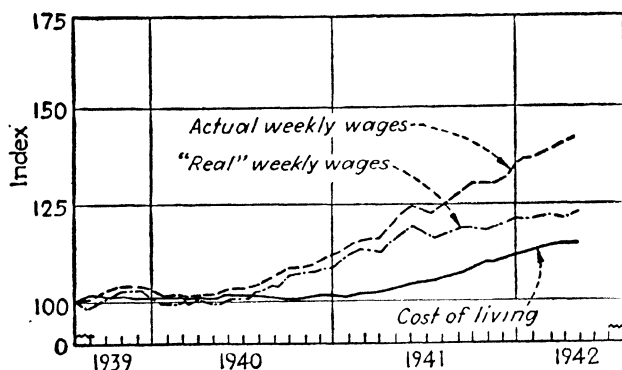
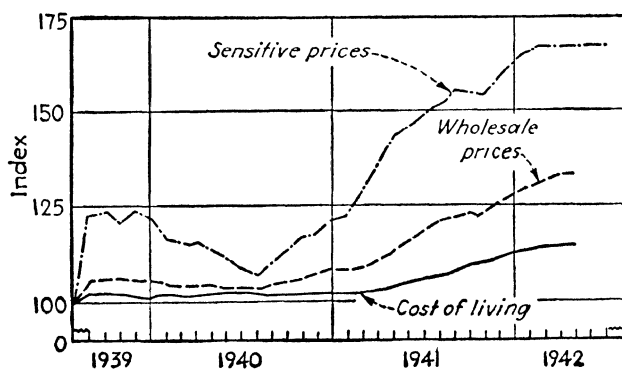


CHART V.—Prices, wages, and cost of living since beginning of World War II. August, 1939 = 100

25 manufacturing industries are shown in the following chart.¹

¹ The figures for sensitive prices and wholesale prices are those of the Bureau of Labor Statistics, adjusted to an August, 1939, base. The

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For the Second World War up to the present time, the wages of the groups covered by these figures, it will be seen, have risen faster than the cost of living.

figures for cost of living are those of the National Industrial Conference Board, and the figures for actual weekly wages and "real" weekly wages are for 25 manufacturing industries, as compiled by the National Industrial Conference Board. These figures are also adjusted to an August, 1939, base.

CHAPTER VIII

INFLATION IN ITS RELATION TO SOCIAL WELFARE ENDOWMENTS AND DEMOCRATIC GOVERNMENT

THE relationship of inflation to social-welfare endowments has previously been mentioned briefly in another connection,¹ but its importance to our American way of life is so great as to call for a separate discussion.

IMPORTANCE OF EDUCATIONAL ENDOWMENTS IN THE UNITED STATES

The endowments under discussion include those of universities, colleges, hospitals, scientific-research foundations, public libraries, churches, and many other similar types of institutions. Preeminent among them are privately supported universities and colleges, by which over half of our higher education in the United States is being conducted. As regards the impact of inflation, they may be taken as fairly representative of social-welfare endowments in general.

Over 2,000 years ago wise old Diogenes said,

¹ See p. 43.

"The foundation of every state is the education of its youth." This is a truth recognized by the founders of our American republic. Thomas Jefferson said, "By far the most important bill in our whole code is that for the diffusion of knowledge among the people." The United States stands high in the first rank among modern nations in the proportion of its revenues devoted to education. In the enrollment of our colleges we lead the world, and no other country can compare with us in the number of colleges supported by private endowments or in the amount of these endowments—the accumulated gifts of generations of self-sacrificing, public-spirited citizens. These great American educational endowments have long been a pride of America and a perpetual wonder to other countries.

Of the many effects inflation has upon educational endowments two are outstanding:

1. A depreciation in the purchasing power of the dollar in terms of which invested funds are payable.
2. The decline in gifts and bequests arising from the advancing rates of income taxes, which are brought about by inflation.

INFLATION DESTROYS ENDOWMENTS

The great bulk of the endowments of our privately supported colleges is invested in securities yielding fixed incomes, consisting chiefly of bonds and mort-

gages and preferred stock. A study¹ recently made of the endowments of 15 representative colleges and universities gave the following figures as of the year 1938, and these figures are probably very little changed today.

For all 15 institutions, representing a total endowment of nearly \$500 million, 62 per cent was in fixed-income-bearing investments, 37 per cent in investments yielding a variable income, and 1 per cent in investments not possible, on the basis of the information available, safely to classify in either of the other groups. For these institutions the percentage of the endowment held in the form of fixed-income investments varied from a high of 81 per cent to a low of 45 per cent. In only one of the 15 was the percentage less than 50.

Fixed-income securities, as we have seen, unlike equities and real estate, pay the same amount of principal at maturity and the same annual income, regardless of what changes may take place in the value or purchasing power of the dollar. A 20-year, 5 per cent, \$1,000 bond, for example, pays \$50 interest a year and \$1,000 at maturity whether the dollar in which it is payable doubles in its purchasing power or in its gold value during the life of the bond or depreciates to one-half its original purchasing-power value or its original gold value. During periods

¹ E. W. Kemmerer, *The Outlook for Our College Endowments*, pp. 8-9; also Endowments in Jeopardy, *Atlantic Monthly*, December, 1937, pp. 729-739.

of extreme inflation, like those in several countries of Europe following the First World War, many bonds, the interest and principal of which were paid in full and the market values of which were always maintained at or near par, became practically worthless because the monetary units in which they were payable depreciated to almost nothing as a result of inflation—an inflation that practically wiped out most of the great public-welfare endowments of continental Europe. I cite the following examples from some case studies made under the auspices of the Duke Endowment.¹

France: The Pasteur Institute.

The endowment of this institution before the war amounted to about fifty million francs. The institute consists of two parts: (1) a laboratory for research, and (2) a department for the preparation and sale of products, especially antitoxins, cultures, etc.

Before the war the research department was supported by means of the income from the endowment, while the receipts from the sale of antitoxins, cultures, and other products prepared by the institution were impounded in a reserve which, in 1914, amounted to ten million francs, and which was augmented year after year by the sale of these products. But despite this annual increase in the reserve, and notwithstanding the fact that the investment of the endowment fund was handled with extraordinary skill during the inflationary period, the total endowment after inflation and stabilization was less than 40 per cent of its pre-war amount. . . .

Austria: The Theresian Academy of Vienna.

This institution corresponds, from the standpoint of its curriculum, to an American high school. It was founded in 1778 by

¹ Philip G. Wright, *Inflation and After*, pp. 22-27.

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the Empress Maria Theresa, although from time to time it has received additions to its endowment fund, which by 1914 amounted to approximately eight million crowns (about \$1,600,000). Prior to the war the income from the endowment fund was sufficient to supply most of the needs of the institution; but inflation reduced this large fund so greatly that at the stabilized rate of 14,400 paper crowns to one gold crown, it had a value after stabilization of a little more than \$112 as compared to \$1,600,000 in 1914. . . .

In Germany a good example is that of the University of Frankfurt am Main. Here for 38 endowments covering investments in 1922 of a face value of approximately 14 million marks, the inflation losses were so great, in spite of benefits received from government revalorization of securities, that the total value in 1928 was less than 2 million Reichsmarks.

INFLATION REDUCES BENEFACTIONS

The second important effect of inflation on educational endowments is its unfavorable influence upon gifts and bequests. These benefactions come largely from the rich, or, at least, the well to do—the classes that are hit hardest by highly progressive income, inheritance, and gift taxes. The process of inflation itself automatically increases the burden of these taxes by pushing up the ratio of money incomes to real, or purchasing-power, incomes. Take, for example, an individual with a net income of \$10,000 and assume that inflation raises his cost of living

INFLATION: ENDOWMENTS AND DEMOCRACY

threefold and likewise his net income. In that case his real, or purchasing-power, income has not been changed, but his money income has become \$30,000, which subjects him to much higher income tax rates and also, for the same reason, to much higher rates for gift and bequest taxes.¹ As inflation progresses, these rates advance, and his actual and prospective tax burden increases relatively to his real income and to the real value of his estate. The uncertainty as to how long this process will continue is also a cause of anxiety. Under such circumstances it is easy to see why serious inflation is a strong deterrent to gifts and bequests. In times of progressive inflation endowed institutions are likely to find their expenses rising at a much more rapid rate than their benefactions.

INFLATION AND DEMOCRATIC GOVERNMENT

In the United States an important aspect of government financing by inflation is the manner in which it directly and indirectly undermines the foundation of our democratic system of government. First, we shall consider the more direct action.

¹ Of course, this situation might be met by proportionate reductions in tax rates, but such a procedure is very unlikely.

INFLATION TENDS TO DESTROY THE PEOPLE'S
CONTROL OF THE PUBLIC PURSE

When prices and wages rise under the stimulus of inflationary forces, the costs of government likewise advance, and the government, therefore, needs continually increasing revenue; but rising costs of living, with the usual lag in wage advances, make the public increasingly resistant to higher taxes. For the obtaining of the additional revenues required to meet these growing expenses, pressure, therefore, becomes strong upon both Congress and the President to resort increasingly to inflation rather than to heavier taxes. Inflation is subtle and insidious in its workings, and the public is much slower to realize the costs of government financing effected through inflation than they are in feeling the burden of increased taxation. *Financing through inflation, accordingly, tends to become progressively the line of least political resistance*, and this policy is, therefore, all too often continued until it terminates in disaster. The resort of a nation to financing by inflation has often been compared to the resort of an individual to opium smoking. The first sensations are pleasant, but the more one takes, the more he wants. The appetite grows by what it feeds upon; the more one indulges, the weaker become his powers of resistance.

The usual antidote for extravagant government expenditures is political opposition to heavy taxation.

The basic principle of Anglo-Saxon democracy is control of the government by the people through their control of the purse, "the surest safeguard of freedom." When the members of Congress who vote for large expenditures of public money are compelled at the same time to vote for additional taxes for meeting these expenditures, taxes that are distributed among all classes of voters, both rich and poor, and that are consciously paid by the voters and not concealed in the form of increased prices, then and only then do the members of Congress become watchdogs of the Treasury and become careful and economical in the expenditures they authorize. If they are not economical, they receive vigorous protests from the "folks back home," and they are not reelected.

The situation, however, is very different when a great part of the expenditures is financed by inflation. The inflation financing may be effected (1) by the antiquated method of direct governmental issues of inconvertible paper money or (2) by the more modern method of the sale of government debt to the banks, which the banks pay for either (*a*) by issuing bank notes or (*b*) by placing to the government's credit bank deposits that the government in turn pays out as it desires by means of checks. Financing by inflation tends to take away the "control of the public purse" from the Congress and to put it in the hands of the executive, a process that is in direct contradiction to the fundamental principle

of Anglo-Saxon democracy. As previously noted,¹ the President of the United States has for a number of years possessed practically unlimited power to finance public expenditure by inflationary processes without the necessity of depending upon Congress to vote increased taxes.

INFLATION BREAKS DOWN PUBLIC MORALE

There are many indirect ways in which financing by inflation undermines the foundations of democratic government, but they fall largely outside the field of economics, and only a couple of them can be touched upon here.

There is the effect, for example, on public morale. Inflation (as likewise deflation) is a powerful engine of wealth redistribution, an engine that works blindly, robbing *A* and paying *B* and then, in turn, robbing *B* to pay *C* or *D*, without regard to the merits or faults of any of the parties concerned. People who find themselves thus arbitrarily robbed of life savings, which they have accumulated by hard work and sacrifice, naturally revolt. To them there seems to be "no justice in the world." They lose faith both in the government and in the moral code.

Periods of serious inflation are invariably times of low ethical standards and of low respect for government. An old French proverb says: "The guillotine follows the paper-money press—the two machines

¹ See pp. 22-27.

are complementary, one to the other." Speaking of the breakdown of public morale that occurred at the time of the paper-money inflation during the French Revolution, Andrew D. White in his classic little book, *Fiat Money Inflation in France*, said:

[One of the] deep-seated signs of disease which now showed themselves . . . was the *obliteration of thrift* from the minds of the French people. The French are naturally thrifty; but, with such masses of money and with such uncertainty as to its future value, the ordinary motives for saving and care diminished, and a loose luxury spread throughout the country. A still worse outgrowth was the increase of speculation and gambling. . . . In the leading French cities now arose a luxury and license which was a greater evil even than the plundering which ministered to it. In the country the gambling spirit spread more and more. . . . Nor was this reckless and corrupt spirit confined to business men; it began to break out in official circles, and public men who, a few years before, had been thought above all possibility of taint, became luxurious, reckless, cynical and finally corrupt.¹

Essentially this same thing could be repeated for every recent case of extreme inflation.

INFLATION AND THE MIDDLE CLASS

Although this breakdown of morals in time of serious inflation applies to all classes of the population, it is likely to be particularly severe in the case of the so-called "middle class,"² the class that is the back-

¹ Pp. 27-29.

² This was true, for example, after the First World War, in Germany, France, Austria, and Poland.

Of the German situation at the end of the inflation Frank D. Graham

bone of modern democracy and of which Thackeray said: "It is to the middle class we must look for the safety of England." The upper class is in a stronger position to protect itself and even if it suffers severely it is at least likely to have some fat left to live on. The lower class puts up a strong resistance because even before the onslaught of inflation it was usually living near the subsistence minimum and because it is willing to ask and in a position to get both private charity and public relief. The middle class, however, which by hard work and thrift has built up a fund of savings to educate its children and to provide a livelihood for times of sickness and for old age, finds itself in a desperate situation in a time of serious inflation. The cost of living rises disproportionately to income; savings are wiped out; and hard work, independence, and thrift seem to be false gods. Under such conditions the middle class is all too often overwhelmed by a sense of futility and desperation.

says: "Inflation had shaken the social structure to its roots. . . . Great numbers of families of long established wealth and position were reduced to beggary at the very time that new or additional fortunes of staggering magnitude were being accumulated. The old middle class wellnigh disappeared and a new group came into prominence. There was less change in the condition of the masses—they had not so much to lose—but the wiping out of savings, insurance, and pensions pressed heavily upon the worker even if his losses did not parallel those of some of the better-to-do social classes."—*Exchange, Prices and Production in Hyper-Inflation Germany, 1920-1923*, p. 14.

CHAPTER IX

CONTROLLING INFLATION—GENERAL CONTROLS

THE subject of controlling inflation may conveniently be viewed from two angles, the angle of general controls (or of functional controls), which is concerned principally with currency and credit, and the angle of specific controls, which is concerned chiefly with goods and price fixing. General controls will be discussed in this chapter and specific controls in Chapters X to XII.

REPEAL OF INFLATIONARY MONETARY LAWS

From what has already been said concerning the nature of inflation, it should be obvious that to control inflation the most important requirement is to stop inflating and that here the first thing to do is to repeal the dangerously inflationary legislation now on our statute books. This includes:

1. The legislation authorizing the President to change at will the gold content of the dollar and the government's price for gold.
2. The legislation authorizing the President to

purchase silver for monetary purposes, to alter the content of the silver dollar, to coin the silver seigniorage, to expand further the circulation of silver certificates, and to establish bimetallism.

3. The legislation authorizing the President to increase the circulation of greenbacks up to three billion dollars.

4. The legislation nationalizing gold, making it a crime to hold monetary gold, and denying the privilege of convertibility into gold on demand to our various kinds of paper money.

5. The legislation that makes administratively possible a renewal of the issue of government-debt-secured Federal Reserve bank notes, which are now in process of retirement.

6. The legislation that restricts to 100 per cent the amount by which the Board of Governors of the Federal Reserve System can raise legal reserve requirements of member banks above the statutory minima. This ceiling should be raised to 150 per cent.

7. The legislation of March 27, 1942, making it possible for a limited period for Federal Reserve banks to buy *directly* from the United States Government its direct, or fully guaranteed, obligations, provided that the amount of such obligations held by the 12 Federal Reserve banks at any one time does not exceed \$5 billion.

The existence in the hands of the President and of his appointees of highly inflationary monetary powers delegated to them by Congress weakens the pub-

lic's confidence in its currency and is a continual threat of a great inflationary rise in the velocities of money and deposit circulation, which we call "a flight from the dollar." The power to "coin money and regulate the value thereof" should be returned promptly to Congress, where it was wisely placed by the fathers of our Constitution.

TAXATION AS A CURB TO INFLATION

Broadly speaking, financing by taxation is the antithesis of financing by inflation.¹ The more a government resorts to the one, the less it will resort to the other. We financed the American Revolution chiefly by inflation—probably no other adequate method was possible at the time—but we are wisely making an effort to finance the present war to a very substantial extent by taxation.

Under taxation the government takes currency away from the people and uses it itself. The people, therefore, have less purchasing power, and the government has more; the people, presumably, buy fewer goods and services and the government, more. This of itself does not push up the price level.

Under inflation financing, on the other hand, the government buys its supplies and services by pumping into circulation (either directly or indirectly) an increased supply of currency, by which it com-

¹ A third possibility, which will be considered later, is financing by noninflationary borrowing; see pp. 100-105.

petes in the market with its citizens for the purchase of goods and services. This competition puts up prices, and the government gets an increasing proportion of the goods, and the citizens a continually declining one, because the government is the source of the supply of the expanding currency and gets there first. The citizen sees his cost of living rise, but for his purchases he can draw on no such pool of new purchasing power as can the government. This is a very simple statement of the central principle, a principle that in its operation becomes complicated, and to this statement many qualifications would be required if it were to be punctiliously accurate and complete.¹

A particular kind of tax may at times be chosen to check inflation in some special area, where for the moment it appears to be seriously threatening. In time of war or threatened war, for example, a substantial tax of some kind might be imposed on the increased incomes received by the owners of war-stimulated industries or by workers in such industries. To the extent that the increase in these incomes was spent in the purchase of the continually decreasing supply of consumers' goods available, it would tend to push up the prices of these goods. The diversion of this purchasing power by taxation would remove purchasing power from individual citizens and thereby would curb inflation in the field of consumers' goods.

¹ Cf., for example, pp. 29-30.

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For such a purpose the best taxes would be fairly high excise taxes on consumers' goods in the luxury and semiluxury classes, a retail-sales tax, and personal income taxes of a type that bear most heavily on the increases of real incomes caused by the war and on those incomes that are spent predominantly for consumption goods, as contrasted with those that are being in large part saved and reinvested in productive enterprise. Ill-adapted for this purpose are such corporate income taxes as prevent the accumulation of adequate funds for plant maintenance and expansion during the war and for postwar readjustments; also ill-adapted are excise taxes on raw materials, which are likely to become cumulative elements in the cost of production and taxes in the already excessively taxed higher income brackets¹ where a large proportion of the income that would be heavily taxed would otherwise be likely to be ploughed back into production.²

¹ For the year 1939, the last year for which figures are available, individuals having net incomes under \$5,000 received 89 per cent of the national income but paid only 10 per cent of the federal individual income tax.

The Office of Price Administration recently estimated that for the year 1941 approximately 78 per cent of all consumer units had incomes of less than \$2,500.

For 1941 Department of Commerce figures show that 64.8 per cent of our national income consisted of salaries and wages, while 68.6 per cent consisted of total employee compensation. Seventy per cent of consumer expenditures in the United States in the year 1935-1936 came within income groups receiving \$2,500 or less per annum. See Department of Commerce Release, Mar. 8, 1942, and *Hearings before the Committee on Banking and Currency*, House of Representatives, 77th Congress, 1st Session, *Price Control Bill* (H.R. 5479 superseded by H.R. 5990), II, p. 1,395.

² *Ibid.*, I, p. 258.

PURCHASE OF GOVERNMENT DEBT

An important method of curbing inflation by absorbing purchasing power is through the sale of government debt to the public. To the extent that people buy government securities with current income that they otherwise would spend for consumption goods, they divert this income away from competition for the declining supply of consumption goods and channel it to the government. In this connection Leon Henderson recently said:

Before long now there will be more purchasing power running around hunting something to buy than there are goods available. If that occurs to a substantial degree, no power on earth can prevent inflation. . . . For that reason the government must sop up some of this extra purchasing power and it can do so in many healthy ways. . . . [One of these ways is to] stimulate saving.¹

These savings and their investment in government debt to be effective should be made by all classes of people, rich and poor alike, but inasmuch as the great bulk of the national income, as we have seen, goes to people of low and moderate incomes and inasmuch as the incomes of these people are being substantially increased by our war activity and as these groups invest only a very small proportion of their increased incomes in productive enterprise, as contrasted with the high-income and middle-income groups, it is desirable that they be induced to save a

¹ Address at Atlantic City, July 14, 1941.

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substantial percentage of this increased income and invest it in government debt.

If the government's efforts to induce wage earners to buy government bonds should not yield adequate results, they may have to be supplemented by some plan of compulsory saving.

COMPULSORY SAVING

For several years the British economist John Maynard Keynes has been advocating for England a compulsory-savings plan, which he has recently elaborated in considerable detail in his book *How to Pay for the War*.

Briefly summarized, the plan provides that the government take from each person who is subject to the law a certain proportion of his earnings, this proportion to be determined on the criterion of relative sacrifice. Persons with incomes below a minimum standard would be exempt. The amounts taken by the government would be collected by the same means as social-insurance contributions. They would be deposited in the Post Office Savings Bank or other depository designated by law and would accumulate interest at the rate of $2\frac{1}{2}$ per cent per annum. With certain qualifications, to be noted later, the amounts so collected would be repaid, with accumulated interest, after the war in installments at dates fixed by the government. It would be expected that the time

of the first installment repayment would be the time of the first postwar slump.

While, in general, repayments would be deferred until after the war and the deferments would be non-transferable, exceptions to the rule would be made to meet emergencies and certain other specified contingencies. These include death, illness, unemployment, and the buying of life insurance.

The British budget law of 1941 contained some compulsory-savings provisions adapted from the Keynes plan. Repayments after the war to those paying certain taxes in the fiscal year 1941 were provided for to the extent of part of these taxes. The government assumed an obligation to make such repayments to individuals and, in the case of excess-profits taxes, to corporations and set up credits to their accounts in the Post Office Savings Bank.

Individual taxpayers will be credited with most of the increase in their income tax up to £65 yearly, which results from the lowering of exemptions and the reduction of earned-income allowance. Corporations will be credited with 20 per cent of the 100 per cent excess-profits tax paid.

Examples of how much the taxpayer will have credited in the form of deferred payments for each year's tax are the following: a married couple with no children, making £160 annually, gets back the total tax it pays, £1/6. A couple making £1,000 pays £351 and gets back about £48.

No provision is made in the law for a capital levy

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or for other methods of obtaining the funds to make the repayments.

Among the advantages claimed for such compulsory-savings plans are the following:

1. They provide the government with funds as they are earned at continually recurring short intervals.

2. They constitute a force against inflation by withdrawing from the market purchasing power that would otherwise be used largely for the purchase of consumer goods.

3. They provide the taxpayer an insurance fund for certain important emergency needs during the war and immediately thereafter.

4. For the postwar period they provide funds that may be used as sustenance money for periods of unemployment at times of economic slumps, which so frequently follow a great war, and they also serve as a backlog of purchasing power, the widely distributed spending of which should help to prevent, or at least to cushion, such slumps.

Among the objections raised to such compulsory-savings plans are the following:

1. As contrasted with tax revenues, they impose upon the government an obligation for repayment to the public after the war and presumably at a time when the government fisc will be badly depleted and when the taxpaying public will be bled white.

2. If the basis for determining the amount of saving required is the individual's total income, the re-

quirement may be very inequitable in its burdens among different persons by reason of the fact that while some incomes increase rapidly under the pressure of wartime demands for labor, others suffer through the diversion of purchasing power from the so-called "peacetime" industries to wartime industries. War crushes some industries and builds up others. In the former group it may cause low wages and unemployment while in the latter it is causing high wages and overtime employment. To subject workers in both groups to the same scale of compulsory-savings rates may work many hardships.

If, however, the rates apply only to the amount of the wage or other income increments over and above the amounts received at some prewar date, the inequities above mentioned will be materially reduced, but the plan will be made administratively much more complicated, and even then many inequities will remain. How could the government determine, for example, the figure for the fair base income of individuals as of a selected prewar date, when many people were unemployed on that date, many only partially employed, many working overtime, and many working at odd jobs out of their usual lines of employment? Then there is the problem of the varying extent to which the different members of a family unit are employed.

3. Compulsory saving means putting aside money today to be received back at some uncertain future dates, and its principal object is to check inflation.

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What assurance is there, however, that there will not be substantial inflation despite all efforts to prevent it? Inflation has occurred in all past wars, and there has already been considerable inflation in nearly all countries during this war. The price level in the United States is now rising, and the opinion is widespread that we shall have much more inflation before peace is attained. In that case those who make these savings are giving up today money of a relatively high purchasing power to be repaid later in money of a lower purchasing power. Certainly, no government can guarantee the purchasing power of the money unit in which compulsory savings shall be repaid.

CURBING INFLATION BY RESTRICTIONS ON INSTALLMENT BUYING

One direct method of curbing inflation is by imposing restrictions on the use of credit for the purchase of consumer goods. A person's potential demand for the purchase of goods is limited by the sum of his cash and credit, and credit is just as effective in this demand as cash. In fact, cash and credit as forms of purchasing power are interchangeable. A man may increase his available credit by decreasing his cash through the payment of a debt, or he may decrease his available credit and increase his cash by borrowing money. The amount of a man's credit depends upon the degree of confidence that potential

creditors place in his ability and willingness to meet his obligations, and these in turn vary directly with the man's income and with the state of business confidence in the business situation and prospects.

VOLUME OF CONSUMER-GOODS CREDIT

The volume of all forms of consumer credit outstanding at the end of 1941 was in the neighborhood of \$10 billion.¹ This covered service credits such as those of doctors and dentists and credits for consumers' nondurable goods as well as those for consumers' durable goods.²

The consumers' nondurable-goods credits include open-account credits of merchants, such as grocers, meat markets, and clothiers, also consumer borrowings from banks and other credit-granting concerns, to the extent that they are used in paying for such goods and services. Here the goods bought are for the most part of an ephemeral character and are largely "used up" within a short time. Their consumable life, or the period in which they give off "consumer usufructs," is thought of in terms of days, weeks, or months—not of years. Payment is usually made in a lump sum.

¹ On this subject, see *House Hearings on Price Control Bill*, I, pp. 124-125.

² "Merchandise credit amounted to nearly 72 per cent of the total, cash credit, or loans to enable consumers to buy for cash, add up to nearly 21 per cent more, while the remaining seven or more per cent is credit granted by service creditors, such as doctors, dentists and hospitals."—Address by N. H. Engle, June 17, 1941.

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The second general type of consumer credit, and the one that is of most importance in connection with the problem of controlling inflation, is that concerned with the purchase of consumers' durable goods,¹ that is, goods that are used or that give off their usufructs normally over a considerable period of time as measured in years. The volume of such credit outstanding at the end of 1940 was estimated at nearly \$6 billion.² Looming large in this class of goods are automobiles, furnaces, stoves, and other heating and cooking devices, electric washing and ironing machines, radios, and (the pioneer in this field) sewing machines.

CHARACTERISTICS OF CONSUMERS' DURABLE GOODS

In addition to their durability, consumers' goods of this class have characteristics that are important from the point of view of the problem in hand:

1. They are sold chiefly on installment credit³—

¹ On the general subject of installment-credit buying of consumers' durable goods, see Rolf Nugent, *Consumer Credit and Economic Stability*, *passim*.

² House *Hearings on Price Control Bill*, I, p. 125.

³ For the year 1940 it was estimated that about 65 per cent of the sales of new passenger automobiles were made on installment contracts, and that this was true of "80 per cent of all refrigerators, washing machines, and automatic furnaces, 75 per cent of all furniture, 70 per cent of all suction cleaners and radios, and 75 per cent of all other electrical equipment for which the selling price exceeds \$20. . . ."—House *Hearings on Price Control Bill*, I, pp. 128-129.

The total amount of consumer installment credit outstanding reached a maximum of about \$6 billion in the summer of 1941. It declined to less than \$5 billion by the spring of 1942.—*Federal Reserve Bulletin*, May, 1942, p. 404.

a fact due to their high cost relative to the incomes of most purchasers, their durability, and the facility with which they can be repossessed in case the buyers fail to make their payments as agreed.

2. Most of them belong to the luxury or semiluxury class of durable goods, the purchase of which can be delayed or even to a substantial extent permanently curtailed without causing great hardship. They have an elastic demand.

3. They require for their manufacture large quantities of metals such as iron, steel, copper, nickel, aluminum, zinc, tin, and lead and also types of machine tools, which are in great demand for war purposes. In 1939, for example, automobile production accounted for 18 per cent of the (net) steel consumption of the United States, 57 per cent of the malleable iron consumption, 34 per cent of the lead consumption, and 23 per cent of the nickel.

Production of refrigerators, washing machines, vacuum cleaners, gas and electric ranges, household heating and plumbing equipment, and other durable goods that are commonly sold to consumers on installment payments appears to account for almost half as much steel and iron as the automobile industry. The quantities of aluminum, nickel, chromium, zinc, and copper that are used in the manufacture of such goods are probably larger than those which go into automobiles.¹

4. They are also strong competitors for the services of metal workers, tool and die makers, engineers,

¹ House *Hearings on Price Control Bill*, I, pp. 126-127.

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and many other skilled workers needed for the production of war implements.

Restrictions placed upon the purchase of such consumers' durable goods, therefore, release raw materials, machines, and labor, skilled and unskilled, for the implementation of war and at the same time tend to divert the money that would otherwise be spent by consumers for the purchase of such goods to the purchase of government debt or facilitate its diversion to the payment of taxes, thereby contributing directly to the support of the war effort.

Furthermore, at the end of the war, when the difficult period of readjusting from a war economy to a peace economy arrives, this pent-up, unsatisfied demand for durable consumption goods would be released, and in place of the policy of restricting the purchase of such goods would be substituted the policy of encouraging it. This would be an aid to reemployment and to economic recovery. It would help to cushion the shocks of postwar economic readjustments.

METHODS OF RESTRICTING PURCHASES OF CONSUMERS' DURABLE GOODS

There are many possible methods of directly restricting the purchase of such durable consumption goods. One is to put a definite legal limit on the quantities of such articles that may be produced, by

licensing producers and by limiting the supply of required raw materials made available for the manufacture of these products, and then to let the prices rise without restriction until they reach the points at which the demand would be brought into equilibrium with the reduced supply. The difficulty with such a policy would be that the rich and well to do would obtain most of the supply, and the poor would obtain very little.

Another possible method is for the government to fix what it considers to be reasonable prices and then to ration the limited supply of the products among those desiring to purchase them. Such a plan, however, whether operated by private capital under government supervision or directly by government, is administratively too cumbersome and expensive for goods other than the elementary necessities of life.

FEDERAL RESERVE RESTRICTIONS ON INSTALLMENT CREDIT

A third method, and the one we in the United States have been employing of late, is to curtail purchases on credit by imposing restrictions on the terms of credit that can be granted purchasers.

On Aug. 21, 1941, the Board of Governors of the Federal Reserve System, under authority of an executive order of the President dated 12 days before, issued its Regulation *W*, imposing restrictions on

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consumers' credit, a regulation that was amended from time to time, mostly in administrative and technical particulars, down to the late spring of 1942.¹ The regulation was directed principally at consumer credit extended for the purchase of consumers' durable goods that used materials needed for armament production. The object was to reduce the demand for such goods. Restrictions were not imposed on all types of consumer credit² and did not include some types of goods that are commonly sold on installment credit.

The two principal restrictions were (1) The imposition of minimum percentages, for different classes of consumers' durable goods, on the amount of down payments required and (2) the fixing of maximum maturities for the payment of the balance, in substantially equal installments and at approximately equal intervals ordinarily not exceeding one month. For example, for sewing machines the minimum down payment was originally 33 $\frac{1}{3}$ per cent, and the maximum time permitted for the installment payment of the balance was 15 months. For household furniture the corresponding figures were 20 per cent and 18 months.

Effective May 6, 1942, and in conformity with the President's special message to Congress on inflation, of April 27, the Board of Governors of the Federal

¹ *Federal Reserve Bulletin*, 1941, pp. 837-848, 974, and 1088-1090; also for 1942, pp. 203-206.

² *Ibid.*, May, 1942, p. 401.

Reserve System issued Amendment 4 to Regulation *W*, which greatly extended the scope of its consumer-credit restrictions and made some of the existing restrictions more rigid.

Specifically, the principal changes were:¹

1. The list of consumers' goods to which the regulation applies was greatly extended. Among the additions may be noted automobile batteries and accessories, household electrical appliances, used furniture, jewelry, and nonmilitary clothing.

2. With a few exceptions, the maximum permissible maturity of installment sales was reduced to 1 year, and the required down payment for listed articles was increased to $33\frac{1}{3}$ per cent.²

3. The scope of the regulation was broadened so as to cover, in addition to installment sales and installment loans, charge-account sales of listed articles and single-payment consumer loans.

4. Single-payment loans of \$1,500 or less were limited to a maturity of 90 days, and where such a loan is to purchase a listed article costing \$15 or more a down payment is also required.

5. Installment payments are not permitted to be less than \$5 a month or \$1.25 a week.

Obviously, the fixing of a substantially increased percentage for down payments, in contrast to the fre-

¹ *Federal Reserve Bulletin*, May, 1942, p. 400.

² Exceptions include automobile sales, for which the maximum maturity is retained at 15 months, and furniture and pianos, for which the required down payment is 20 per cent.

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quently low down payments required in recent years, should greatly restrict purchases. The same result should follow the shortening of maturities and the corresponding increases in the amount of the installment payments.

CHAPTER X

CONTROLLING INFLATION—PRICE FIXING PRIOR TO THE END OF THE FIRST WORLD WAR

METHODS OF PRICE FIXING

BROADLY speaking, there are in a capitalistic economy two methods of direct action on prices that a government can use to restrain price advances. They are (1) the fixing by government order of maximum prices for selected individual commodities or groups of commodities that are "affected with a large public interest," and (2) the fixing by law of an over-all price ceiling for all commodities and for rents, wages, and other service payments, with provisions in the law for changes by administrative action when adequate cause for change can be shown.¹

¹ A third possibility, but one involving a departure from a capitalistic economy, is the assumption by the government of the marketing—both purchase and sale—and possibly also the production, of the entire supply of certain specified commodities.

In actual practice there are no sharp lines delimiting these three methods. The adoption of any one of them is likely to mean frequent excursions into the fields of the others, or at least strongly in those directions.

HISTORICAL SURVEY

The plan of fixing maximum prices for selected commodities, known historically as the *maximum*, has been practiced widely over Europe and America for many generations and has appeared in an almost infinite variety of forms. It was the policy adopted by the United States during the First World War.

The maxima fixed by France at the time of the French Revolution to hold down the prices of grain, meat, vegetables, fuel, clothing, and other articles against the rising tide of assignats are familiar to all students of money. Other early examples are the attempts at price fixing in America, by both the states and the Confederation in the days of the American Revolution. Criticizing this practice at the time of the Continental paper-currency inflation, John Witherspoon said, in a letter to Washington:

Fixing the prices of commodities has been attempted by law in several states among us, and it has increased the evil it was meant to remedy, as the same practice ever has done since the beginning of the world. . . . To fix the prices of goods, especially provisions in a market, is as impracticable as it is unreasonable. The whole persons concerned, buyers and sellers, will use every art to defeat it, and will certainly succeed.¹

Concerning the rise in prices resulting from the issue of Continental paper money in 1777, Bolles said:

¹ Letter to George Washington, in *Works of John Witherspoon*, IX, pp. 150 and 153. See also C. J. Bullock, *Finances of the United States*, 1775-89, pp. 126-127.

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The rise of prices was regarded a terrible evil; and Congress sought to prevent this inevitable effect of the over-issue of paper money by a measure, which in the light of these days looks puerile enough, but which at that earlier period found numerous supporters. The plan was to fix the prices of all commodities, both domestic and imported, by legal enactment. This was in no sense a novel conception; for, at an early period in New-England colonial administration, the experiment had been tried; the prices of labor, and of almost every thing forming the subject of sale or exchange, having been established by law.¹

These efforts, however, availed little for prices continued to soar.

At the time of the First World War and for several years thereafter, most of the inflation-ridden countries of Europe and some on this side of the Atlantic endeavored to hold down prices by legally establishing price ceilings for selected commodities that were affected with an important public interest. Among these countries were Germany,² Russia,³ France,⁴ Mexico (during its revolution of 1912 to 1917),⁵ and the United States.

Let us review briefly our own experience with this general type of control at the time of the First World War.

¹ *Financial History of the United States*, pp. 158-159.

² H. Schacht, *The Stabilization of the Mark*, p. 20.

³ S. S. Katzenellenbaum, *Russian Currency and Banking 1914-1924*, p. 73.

⁴ H. E. Fisk, *French Public Finance in the Great War and Today*, pp. 81-82.

⁵ E. W. Kemmerer, *Inflation and Revolution*, p. 64.

PRICE FIXING IN THE UNITED STATES DURING THE FIRST WORLD WAR

The period of the First World War was the only time in the history of our national government in which it undertook on any considerable scale the fixing of commodity prices.

Four outstanding features of this experience were (1) its short duration, (2) its limited scope, (3) its decentralized administration during the greater part of the time, and (4) the large, though slowly declining extent, to which dependence was placed on voluntary action.

1. *Short Duration.* From April 6, 1917, when we entered the war, until the signing of the Armistice, Nov. 11, 1918, was only a few days more than 19 months. The war, however, had been waged in Europe for approximately 31 months by the time we entered, and during that time commodity prices in the United States had risen in a spectacular way, particularly the prices of so-called "war goods." On the commodity side of the price ratio these advances had been due chiefly to the heavy demands of the belligerent countries for the implements of war; and on the money side, by the expansion of our supply of money and circulating bank credit made possible by the establishment of the Federal Reserve System in 1914,¹ and the heavy net importations of gold be-

¹ See E. W. Kemmerer, *High Prices and Deflation*, pp. 14-17.

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ginning in January, 1916, and totaling over a billion dollars from that month through March, 1917.

The 31 months of the war prior to our entry had witnessed price advances in the United States of the following magnitudes:

Commodity or Group	Percentage Advance
General prices	32
Wholesale prices	60
Raw materials	68
Farm products	75
Metals and metal products	83
Iron and steel	159
Chemicals	107

After we entered the war, our demand for war supplies was added to that of the Allies, resulting in a further sharp rise in the prices of these products.

At the time of our declaration of war the only agencies that were favorably situated to give prompt consideration to the problem of price fixing were the Federal Trade Commission, the Council of National Defense, and its two subsidiary organizations, the Munitions Standards Board and the General Munitions Board. The powers of all these agencies were investigatory and advisory. Little toward price control was accomplished until August, 1917.¹

Even after these beginnings progress was for some time rather slow and halting. The problem was a

¹ See Army and Navy Munition Board, *History of Development of Price Control during the World War*, House of Representatives, 77th Congress, 1st Session, *Hearings before the Subcommittee on Appropriations on Second Deficiency Appropriation Bill for 1941*, p. 815.

new and highly complex one, and both Congress and the Administration were feeling their way. The development as viewed by Bernard M. Baruch, who took an active part in this work during the war, has been briefly summarized as follows:¹

. . . Nearly twelve months elapsed after our declaration [of war] before we had evolved controls and organization capable of co-ordinating our own and our associates' procurement activities and of controlling price. Notwithstanding this delay and the dimness with which controlling principles were at first perceived, we did, in 1918, arrive at a method which checked the process of inflation in America and kept it in check until all controls were released in November, 1918.

2. *Limited Scope.* The field of prices over which the government sought to exercise control was at all times limited, although it expanded as the war progressed, and by the end of the war controls were applied to some 573 commodities. At no time did Congress specifically authorize the President to undertake a program of over-all price control.

Throughout the war most of our efforts at price regulation came under two general classes: (a) the first was raw materials and partially finished products required by the United States and its allies. Here the object was to avoid pushing up prices by competitive bidding. The controls were usually applied only at points of production. Prices so fixed, however, were in most cases made applicable also to the general public. Looming large, from the begin-

¹ Bernard M. Baruch, *American Industry in the War*, p. 381.

ning, in this class of commodities were the basic metals and certain chemicals. (b) The second class was commodities of the so-called "necessity" classes, required by consumers, especially the more basic foods and fuels. Here the ultimate object was to control retail prices, although restrictions were often placed on the prices before the goods reached the retailers, as, for example, while they were in the hands of processors, jobbers, and wholesalers.

3. *Decentralization.* There were many different government agencies working in the field of price regulation. These agencies were not under effective centralized control and therefore often worked at cross purposes.

Before July 28, 1917, most of what little price regulation we had was in the hands of the Council of National Defense, composed of six cabinet officers and an advisory committee of seven members. After that date the control over the prices of basic raw materials and partially finished products needed by our government and its allies was exercised for a while by the War Industries Board, which was created on July 28, 1917, by the Council of National Defense. The board was an independent body and reported directly to the President. It was given broad powers to coordinate the war effort, including specific directions "to consider price factors."

On Mar. 4, 1918, the President removed most ¹ of

¹ Informal price controls continued to be exercised by the Board independently of the Committee over a number of commodities, including

the price-fixing functions from the board and turned them over to the Price Fixing Committee, which he created on that date. This committee in addition to its chairman and two *ex officio* members (the chairman of the War Industries Board and the labor representative of that board) contained representatives of the War Department, Navy Department, Fuel Administration, Tariff Commission, and the Federal Trade Commission.

The Food Administration was created under authority of an act of Aug. 10, 1917, and was gradually given control over the prices of nearly all important kinds of food.

The administration of the Food Control Act was more decentralized than that of any other federal price control agency. A federal Food Administration was set up in every state, and a considerable degree of independence was given to the state organizations in the establishment of "fair prices." . . .¹

Under authority of the same act of Aug. 10, 1917, the Fuel Administration was also established. It was given important controls over the prices of coal, coke, and petroleum.

Other agencies that participated to some extent in the government's price-controlling activities were the War Trade Board (with particular reference to the prices of exports and imports), the War Department, the Navy Department, the Department of

among others lead, nickel, platinum, manganese ore and alkalis.—House *Hearings on Price Control Bill*, I, p. 227.

¹ Charles O. Hardy, *Wartime Control of Prices*, p. 147.

Agriculture, the Federal Trade Commission, the Federal Reserve Board, the Sugar Equalization Board, and the United States Grain Corporation.

As previously noted, there was some overlapping in the membership of these different price-controlling agencies. There were nearly 11,500 paid employees engaged in price and rationing work, and in addition there were about twice as many volunteer workers.

4. *Voluntary Character.* A large part of our American price fixing during the period of the First World War was of a voluntary character on the part of the sellers. The principal exception was the price control exercised over certain necessary foods by the Food Administration under authority of the Lever Act. Here the control was exercised largely through a system of licensing dealers and processors. This act had plenty of teeth in its penalty provisions.

There was very little direct compulsion exercised by the War Industries Board, the Price Fixing Committee, or the other agencies of price control. The experience in this connection has been summarized as follows by Hardy: ¹

In most cases the number of firms in the industries concerned was small enough so that control could be exercised through contact with the war service committees, without the necessity of propaganda among, or compulsion upon, individual business men. Consequently no licensing system or other machinery of enforcement was set up. Prices were fixed by negotiation and agreement,

¹ *Ibid.*, p. 120.

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and were binding, as maxima, on all government purchasing agencies. Except in a few cases where compulsory orders were placed by the Army or Navy, there was no legal compulsion on any one to sell at these prices. Though the threat of requisitioning, compulsory orders, and commandeering was used as a bargaining weapon, there was extreme reluctance to make extensive use of these devices. There was no enforcement division.

Concerning his experience with voluntary price fixing, Bernard Baruch said:

I bore the heat and burden of nearly every one of the principal price determinations except food, and I am speaking from intense experience when I say that in most cases those prices, while eventually accepted wholeheartedly, were not unconstrained free-will offerings of all by any manner of means. . . . We fixed prices with the aid of potential Federal compulsion and we could not have obtained unanimous compliance otherwise.¹

To the same effect Herbert Hoover testified concerning the Food Administration: "The licensing system, however, is the backbone of all control. Without compulsion there always will be a few slackers in every trade who will profit by the patriotism of the majority and prevent any effective control."²

The legal authority back of most of the First World War price fixing was in fact rather doubtful. There was considerable talk of a big stick in the closet but much doubt as to whether it was made of hickory or soft rubber.

¹ *American Industry in the War*, p. 440.

² *Food Administration Report*, 1917, p. 10.

RESULTS OF OUR EFFORTS AT PRICE FIXING DURING
THE FIRST WORLD WAR

The question of the degree of success the government achieved in its efforts at price control during the period of our belligerency in the First World War is one on which there are wide differences of opinion. An attempt to answer it satisfactorily would require a long discussion and at best would be of doubtful value. It will not be made here.

Our efforts covered a brief period of time and were not begun until inflation was pronounced. Different organizations and different methods were used for different groups of commodities, and the responses of these groups and of the different commodities in each of them varied widely. We know how far prices went up under the kinds of controls inaugurated, and we can compare the price movements of controlled prices with those of uncontrolled prices, but we do not know where the controlled prices would have gone had there been no controls, nor do we know the extent to which the movements of uncontrolled prices were influenced by the checks exercised over controlled prices.

The chart¹ on page 125 covers 1,366 series of commodity prices, of which 573 series were controlled and 793 were uncontrolled. From 1913 to the latter

¹ The chart is reproduced from the War Industries Board, *History of Prices during the War*, summary prepared by Wesley C. Mitchell, p. 47.

PRICE FIXING PRIOR TO 1919

part of 1916, it will be seen, the two groups moved very closely together, and then, although both groups continued to rise, the group that was later controlled rose the more rapidly, reached its wartime maxi-

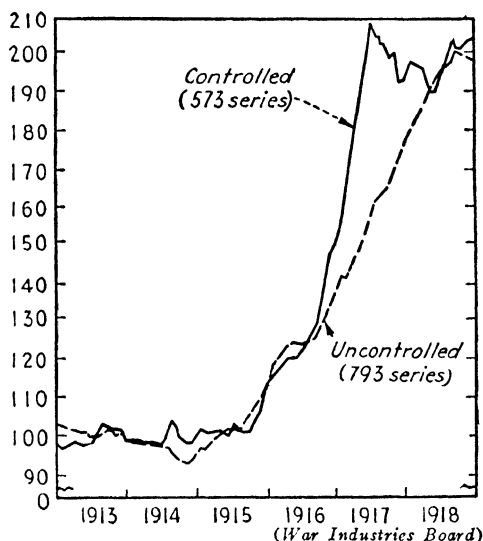


CHART VI.—Prices of all commodities, controlled and uncontrolled, during World War I, 1366 Series. July, 1913–June, 1914 = 100

mum by the summer of 1917, when the controls began to operate, and then leveled off somewhat until the end of the war. The uncontrolled prices continued to rise, however, throughout the second half of 1917 and the year 1918, but by the time of the armistice they had reached only the level of the controlled prices.

Since basic articles of wartime demand counted

large in the controlled group and were at such a time the commodities with the most sensitive prices, it would be expected that before the controls were put into operation these commodities would have advanced faster than those of the uncontrolled group. Of this situation Mitchell said: ¹

The commodities afterwards controlled were very much more affected by the declaration of war than the others; they rose 35 per cent in price between February and July [1917], while the uncontrolled commodities rose 13 per cent. Control was applied, then, to prices which as a group were very high before the Government's economic program was developed. That fact doubtless facilitated the effort to prevent a further advance or even to reduce prices.

No one can answer the question how much faster and how much farther the controlled group would have advanced if there had been no controls.

¹ *Ibid.*, p. 43.

CHAPTER XI

CONTROLLING INFLATION—PRICE REGULATION DURING 1941

ADMINISTRATIVE PRICE REGULATIONS PRIOR TO THE EMERGENCY PRICE CONTROL ACT OF 1942

ALTHOUGH there were some informal price controls, notably of zinc and copper, as early as September, 1940, the direct controlling of the prices of individual commodities on any considerable scale by the government under Presidential authority did not begin until early in 1941. The work was done by a branch of the National Defense Advisory Commission, the Price Stabilization Division, headed by Leon Henderson. Prior to April 11 price schedules had been fixed on secondhand machine tools, certain forms of aluminum and zinc, copper, and lead, also iron and steel scrap, and bituminous coal.

In an executive order issued on April 11 President Roosevelt put in a more definitive form the work of direct price control.¹ He created in the Office

¹ With reference to the legal authority of the President to set up such an office as OPACS, assigned the duty of establishing price ceilings, there was some question. No legislation specifically granted the President any such power, and it was implied from other powers of a more general character.

The subject is discussed at some length in a memorandum submitted

of Emergency Management the Office of Price Administration and Civilian Supply, popularly known as OPACS, under the headship of Mr. Henderson.

The office was created "for the purpose of avoiding profiteering and unwarranted price rises, and of facilitating an adequate supply and the equitable distribution of materials and commodities for civilian use" and in general "in the interest of national defense."¹

The executive order of Apr. 11, 1941, provided that there should be in the OPACS a Price Administrative Committee consisting of the Administrator,

to Mr. Henderson on May 8, 1941, by David Ginsburg, general counsel for OPACS. The nature of the argument in support of the existence of such authority is summarized in the following paragraph in this memorandum:

"The authority underlying the issuance of ceiling price schedules is derived from (1) the implied constitutional powers of the Chief Executive during a period of emergency, and the obligation of the President 'to take care that the laws be faithfully executed,' and to integrate in sound defense policy the administration of the laws providing for the coordination of our industrial resources, including the laws providing for commandeering, and the law authorizing priorities for defense production; (2) congressional acceptance of such exercise of Executive authority, which was fully disclosed to congressional committees and commissions; (3) virtual reenactment of the commandeering provisions of the Army Appropriation Act of 1916 in section 9 of the Selective Service and Training Act of 1940, following reliance upon the commandeering powers to support such maximum prices, as indicating legislative approval thereof."

The memorandum is published in full in House *Hearings on Price Control Bill*, I, pp. 373-384.

¹ Among the duties of the Price Administrator, the more important were the following:

"a. Take all lawful steps necessary or appropriate in order (1) to prevent price spiraling, rising costs of living, profiteering, and inflation resulting from market conditions caused by the diversion of large segments of the Nation's resources to the defense program, by interruptions to normal sources of supply, or by other influences growing out of the

as chairman, the Secretary of the Treasury, the Secretary of Agriculture, the Federal Loan Administrator, the Chairman of the Tariff Commission, the Director General and Associate Director General of the Office of Production Management, or such alternate as each might designate, and such other members as the President might subsequently appoint.

The duties of this committee were to make findings and submit recommendations to the Administration concerning the establishment of maximum prices, commissions, fees, and the like.

Price controls were put into effect and admin-

emergency; (2) to prevent speculative accumulation, withholding, and hoarding of materials and commodities; (3) to stimulate provision of the necessary supply of materials and commodities required for civilian use, in such manner as not to conflict with the requirements of the War, Navy, and other departments and agencies of the Government, and of foreign governments, for materials, articles, and equipment needed for defense (such requirements are hereinafter referred to as 'military defense needs'); and (4) after the satisfaction of military defense needs to provide, through the determination of policies and the formulation of plans and programs, for the equitable distribution of the residual supply of such materials and commodities among competing civilian demands.

"b. Make studies of the Nation's civilian requirements for materials and commodities, the supply of goods and services, the status and trend of prices and factors thereof, and the impact of the defense program upon civilian living standards. . . .

"c. Determine and publish, after proper investigation, such maximum prices, commissions, margins, fees, charges, or other elements of cost or price of materials or commodities, as the Administrator may from time to time deem fair and reasonable; and take all lawful and appropriate steps to facilitate their observance. . . .

"g. Formulate programs, designed to secure adequate standards for, and the most effective use of, consumer goods; stimulate the utilization of substitutes by civilians for consumer goods and commodities of limited supply; develop programs with the object of stabilizing rents; and promote civilian activities which will contribute to the purposes of this order."

istered by this committee until the enactment of the Emergency Price Control Act of Jan. 30, 1942. Before discussing this act, let us review briefly the extended controversy over price-control policy that preceded its enactment.

THE OVER-ALL-CEILING V. SELECTIVE-PRICE-CONTROL CONTROVERSY

The need was early felt by a large part of the public for price-control legislation of a comprehensive and definitive character with adequate enforcement penalties. Such legislation was sought by the Administration and backed by a strong public opinion.¹ To this end, several price-control bills were introduced in both houses of Congress. Broadly speaking these bills covered two plans, the so-called "Over-all Price-ceiling Plan" and the "Selective Price-control Plan." The former was popularly known as the Baruch Plan because its principal champion was Bernard M. Baruch, who, as a member and later as chairman of the War Industries Board, in 1917 and 1918 had had much to do with the government's price-control efforts of the First World War period.

The Selective Price-control Plan was popularly known as the Henderson Plan from its principal champion, Price Administrator Leon Henderson. The Henderson Plan, as formulated in the Glass-

¹ See Gallup and *Fortune* polls, summaries, *Public Opinion Quarterly*, Fall, 1941, pp. 471-472; Winter, 1941, p. 667.

Steagall Bill (H.R. 5479 superseded by H.R. 5990), had the support of the Administration. The principal bill embodying the Baruch Plan was the Gore Bill (H.R. 5760). Extensive hearings on these bills were held by the Committees on Banking and Currency of the House¹ and of the Senate.²

Since we are not concerned with the detailed provisions of either of these bills, but rather with the principles involved, we shall review the two plans in their broad outlines and consider the pros and cons of the debate concerning them.

THE BARUCH PLAN

The essentials of the Baruch plan may be briefly summarized as follows: Prices of all kinds, also rents, wages, fees, and interest rates were to be stabilized as of a particular time in the recent past—a time at which they were presumed to represent a fairly normal demand-and-supply level and interprice relationship. This placing of an upper limit on any particular price or other charge was not necessarily final, but the presumption was in its favor, and the limit could be raised only by special permission after due hearing by the price-control administration. Mr. Baruch epitomized the plan in the following statement:³

¹ House of Representatives, 77th Congress, 1st Session, *Hearings*, H.R. 5479 (superseded by H.R. 5990), Parts I and II.

² Senate, 77th Congress, 1st Session, *Hearings*, H.R. 5990.

³ House *Hearings on Price Control Bill*, II, p. 997.

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I proposed that some date, on which the normal operation of the law of supply and demand can be said to have controlled prices, be selected and that the entire price structure be stabilized, I mean not freezing but subjected to a ceiling, as of that date. Prices, rents, wages, commission fees, interest rates—in short the price of every item of commerce or service—would not be permitted to rise above the maximum on that date. They could fluctuate below this ceiling. A competent tribunal would then adjust any of these maximum prices, upward or downward, whether to cure incidental injustice or undue hardship or to increase production.

The plan, he said,¹

. . . addresses the whole interrelated pattern of prices as it exists under present natural economic law and says of it, "Since arbitrary governmental rationing will henceforth govern supply, and governmental priority—and not price—will control demand, we propose to keep intact this, the last normal price schedule which we are likely to see for many a day." It is a preservation of a natural existing determination rather than a substitution of a collection of artificial determinations.

Advantages Claimed for the Baruch Plan. The principal advantages claimed for the Baruch plan are its simplicity, its equitability, its quickness of action, its effectiveness, and its favorableness to a good public morale. Each of these points will be considered separately, although it is recognized that to some extent they overlap.

1. SIMPLICITY. This advantage is so evident as to require no elaboration. The plan places a ceiling on prices, wages, rents, and fees at the levels prevail-

¹ Baruch, *American Industry in the War*, p. 473.

ing on a certain date. This is something everybody can understand.

2. **EQUITABILITY.** The plan is equitable. Unlike so much of our national legislation relating to economic affairs, this plan treats all classes alike, the rich and the poor, the big corporation and the small, the farmer, the laborer, the manager, the professional man, the landlord, and the capitalist. It "affords equal treatment for all and gives special privilege to none."¹

3. **QUICKNESS OF ACTION.** The minute the law is passed, it becomes effective in putting a ceiling on all prices. In such matters time is of the essence. Under this plan the prices of some things cannot run away while those of others are being brought under control. Price distortions are thereby curbed. Maladjustments can be taken care of as they are brought to the attention of the price-fixing authorities. Mr. Henderson conceded this point to a degree when he said:²

The main value of an over-all price ceiling is the creation of a breathing spell during which the price authorities can develop the more refined methods to deal adequately with the situation, particularly with a sudden upward pressure on the price system.

4. **EFFECTIVENESS IN MAINTAINING A PRICE EQUILIBRIUM.** Every price (inclusive of every wage rate, interest rate, fee, and other production charge) is to some degree immediately or remotely related to every other price. Certain goods are raw materials

¹ Albert A. Gore, Town Hall Meeting, *Bulletin*, Nov. 3, 1941, p. 1

² House *Hearings on Price Control Bill*, I, p. 89.

for other products or for the machinery and tools by which other products are made, transported, sold, and financed. Most goods, moreover, are possible substitutes for other goods, and when the price of article *A* rises, the demand shifts to article *B* or *C*. Likewise, when the profits realizable in the production of one article decline, production is shifted to other articles more favorably situated.

5. FAVORABLENESS TO GOOD PUBLIC MORALE. Another argument frequently advanced in favor of the Baruch plan was that it was favorable to a good public morale. This advantage is a corollary to the advantages of simplicity and equitability just discussed. People will support a plan that they understand and that they think is just.

On this point Baruch said concerning his plan:¹

There can be no question of favoritism. All prices are treated together, no groups are specially favored or discriminated against; the whole business is kept on the loftiest possible plane, equal treatment for all.

Congressman Monroney said, "I think the industry would be more apt to police itself if everybody was under one ceiling."²

SELECTIVE PRICE-CONTROL, OR HENDERSON, PLAN

The selective price-control plan contemplated placing under control the prices of only such indi-

¹ House *Hearings on Price Control Bill*, II, p. 1000.

² *Ibid.*, I, p. 869.

vidual commodities as experience should prove required control for the effective carrying out of our defense program. Different commodities were to be brought under price control from time to time as the situation should seem to require. Both the extent of the control and the methods of control could be different for different groups of commodities concerned or even for different commodities within a particular group. The prices of all commodities not specifically brought under control would be left free. The idea was to encroach on the free-price system only to the extent necessary. As Henderson said:

The free market is the best regulator of supply and demand that has ever been thought of; but when you get an enormous increase due to the Government's impact of its own buying, the Government at times has got to step in and prevent the price from following its natural course.¹

Although there was to be no limit on the number of commodities that might be brought under price control, it was contemplated that it would be sufficient to extend the control to a comparatively small number. While Mr. Henderson admitted that the selective price-control plan might in experience ultimately approach an over-all price-ceiling plan and while he desired the legislative authority to extend selective commodity-price control to the limit in case of necessity,² he said:

¹ House *Hearings on Second Deficiency Appropriation Bill for 1941*, p. 802.

² Town Hall Meeting, *Bulletin*, Nov. 3, 1941, p. 6.

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I believe that by taking between 75 and 100 of the principal commodities or industries, with various fabricated products, you could keep the price level in workable control. . . . There are such large operations that are under the control generally of a small number of producers, particularly in the basic commodities and in the first process of manufacturing, that by taking hold of that much and establishing a proper relationship, you are free to handle unusual problems that would occur outside, and it would seem to me that if you got that portion of the economy under control then you could deal with the special situations.¹

Merits Claimed for the Selective Price-control Plan. The particular merits claimed for the selective price-control plan were (1) experience, (2) flexibility, (3) minimum of administration, (4) minimum of regimentation, and (5) ease of timing. These alleged merits, which obviously to some extent overlap and are not entirely coordinate, may be described briefly.

1. EXPERIENCE. Prior to the present emergency the only considerable experience this country, as a nation, ever had with commodity-price control was that of the First World War, previously described.² That experience was with the selective plan, and it taught us many valuable lessons. During the present emergency we began price control with the selective plan³ and, as previously pointed out, progressed rapidly in imposing selective controls until early 1942, while the controversy we are now reviewing

¹ House *Hearings on Price Control Bill*, I, pp. 838, 844.

² See pp. 117-126.

³ See pp. 127-130.

was being carried on. From April, 1941, to January, 1942, the price-control pup was rapidly growing into a husky watchdog.

We as a nation never had any experience with an over-all price-ceiling plan, nor had any other democracy. The first instance of the kind was that of Canada, whose plan was not put into effect until Nov. 17, 1941, so that the Canadian experience up to that time afforded us no lessons.¹

2. FLEXIBILITY. A second advantage claimed for the selective-control plan is a high degree of flexibility. Instead of freezing a price for everything all at once and then making exceptions for individual cases as needs for them are established, the selective plan feels its way, controlling only the prices of those commodities that are found urgently to need control, fixing the limits in accordance with the particular situation of each commodity, and changing those limits as changing conditions seem to demand. In discussing the relative merits of the over-all and selective-control plans, Hardy in supporting the latter says: ²

The price-ceiling plan makes for unnecessary and undesirable inflexibility. In its emphasis upon the importance of freezing the price structure, allowing changes to occur only when they are demonstrated to be necessary, there is a tendency to overlook the necessity of allowing prices to adjust themselves in the light of

¹ For a recent study of Canadian experience with price control, see E. T. H. Kjellstrom and others, *Price Control—the War against Inflation*, pp. 72-109.

² C. O. Hardy, *Wartime Control of Prices*, pp. 100-101.

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shifting conditions. . . . The price mechanism serves a useful function in directing labor and materials from one line of production into another in response to changing demands. . . . The ceiling plan, in order to forestall a possible undesirable general inflation, abrogates this function of the pricing process.

3. MINIMUM OF ADMINISTRATION. The third advantage claimed for the plan, and the one that was emphasized most strongly by its advocates and denied as strongly by its opponents, was that of requiring a minimum of administration and of administration costs.

The contrast drawn was that of regulating the prices of a comparatively few important commodities, on the one hand, or of regulating the prices of everything, on the other hand. An over-all ceiling, it was argued, would require the control of an almost infinite number and variety of economic goods, covering wholesale and retail prices of commodities of all kinds, the prices of real estate, and securities, rents, interest rates, wages, fees, and contracts covering compensation for all sorts of other services.

Testifying on the price-control bill, Donald Nelson said¹ that Sears, Roebuck and Company alone handled probably 30,000 different items and that the best city drugstores would handle in the neighborhood of 15,000 or 20,000.

Referring to this difficulty of the over-all ceiling plan, Mr. Henderson said²

¹ House *Hearings on Price Control Bill*, II, p. 1198.

² *Ibid.*, I, p. 840.

[it] would be intended to cover every price, every return for compensation, every commission, every interest rate, every rent, every sale of a piece of real estate, and every retail price. . . . No country grocery store could vary the price without some general permission from Washington, and no wage rate could be changed, no bank could change its rate on loans and no rent could be changed without some administrative determination.

The difficulty of regulating prices on such a scale as this was claimed to be prodigious.

Such a plan, it was emphasized by many writers, would involve administrative decisions on a multitude of bothersome questions, such as those involving changes in the quality of commodities or of the terms of delivery, payment, or maintenance when the price itself remained unchanged; questions of depreciation; and such wage questions as changes in the hours of work, in regulations concerning overtime, of vacations, and the like, even when the flat wage rate remained unchanged.

The cost of administering a large and complicated price-control plan of this sort, it was claimed, would be enormous.

Furthermore the amount of evasion, it was said, would be great. In the opinion of Mr. Henderson:¹

There would undoubtedly be . . . less bootlegging and less successful violation under the selective price-control measure because of the possibility of concentrating on fewer commodities and industries and thus being better able to familiarize yourself with the channels of trade, and also because in a number of these prin-

¹ *Ibid.*, I, p. 868.

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cial commodities there are fewer producers [so that] . . . the job of getting acceptance and compliance is much easier.

4. MINIMUM OF REGIMENTATION. The fourth alleged advantage of the selective price-control plan is that of minimizing regimentation. The elaborate administrative machinery that would be required to handle such controls would involve a mass of detailed regulations, the keeping of extensive records by the public, and the making of numerous reports. It would involve what the public would consider to be a mass of entangling red tape and official snooping, with the usual penalties for noncompliance with the law. The American people dislike regimentation, and of late many of them have been pretty well fed up on it.

5. EASE OF TIMING. The fifth and last argument for the selective price-control plan which needs to be summarized is that relating to the selection of a base period of time.

Under both plans the upper limits imposed upon prices were to be the prices of some particular past period. Under the Baruch plan the same basic period, it was usually held, would apply initially to all prices, but under the selective plan prices as of different dates would be fixed as the ceilings for different commodities, the basic date chosen in each case being the one that was considered best adapted for the commodity in question at the time the ceiling was imposed.

If the Baruch plan had been adopted before the upward surge of commodity prices became pronounced, under the pressure of the war, the basic date could have been a near one, on which most prices might have represented "a normal demand-and-supply" level. The outbreak of the war, in September, 1939, however, brought about in this country great price disturbances, and these disturbances continued.

By the late summer and autumn of 1941, when Congress was seriously considering the subject of price control, the nation's normal price picture had experienced great changes. Many important prices had advanced enormously, while some had actually declined, and the great bulk of them had witnessed moderate advances.

In a price-limiting plan, to adopt as the base the prices of an early supposedly normal period would have called for many disturbing price reductions for those commodities that had risen most. On the other hand, to use the prices of a later date as the ceiling would have placed the ceiling unduly high for the commodities that had risen most and relatively low for those that had risen little. Such a policy would have been looked upon as very unfair. Moreover, any attempt of the price-fixing authority to make adequate adjustments for these varying degrees of lag in price advances would have involved an enormous amount of administrative adjustment and would have

meant a corresponding departure from the postulates of the over-all ceiling plan.

On this subject the following brief extracts from testimony at the House committee hearings are significant:

Secretary Morgenthau: ¹

Some commodities have gone up nearly 200 per cent, while some other commodities have gone up very little. Such situations, and there are many of them, would result in a great deal of inequity.

Donald Nelson: ²

We have been going along in this defense program now for about 14 or 15 months, and the law of supply and demand has been interfered with since that time. If we could automatically go back and take some date when the law of supply and demand was working, I would agree with you [in supporting] some sort of a general price ceiling as Mr. Baruch has advocated. . . . When we have to administer an over-all price ceiling and make corrected judgments, we have a terrific administrative job. . . .

When you make anything retroactive on prices you disturb all the contractual relationships that have occurred back through that time and great injustice will have to be done to some people. For instance, a retailer who has bought goods, we will say, at certain prices expecting to sell them to the public for a certain price, or a wholesaler or distributor, you disturb all his relationships when you go back retroactively and set an over-all price ceiling.

The debate both in Congress and in the public press on the comparative merits of the over-all price-ceiling plan and the selective price-control plan was

¹ *Ibid.*, II, p. 1087.

² *Ibid.*, II, pp. 1238, 1175.

vigorous and extended over many months. Each of the arguments just outlined in support of one plan was questioned by the proponents of the other plan.

SELECTIVE PRICE CONTROL BECOMES LAW

For all immediate purposes the controversy was brought to a close by the adoption of the selective price-control plan when the President on January 30 signed the Emergency Price Control Act of 1942.

CHAPTER XII

PRICE CONTROL UNDER THE ACT OF 1942

IN THIS concluding chapter we shall review briefly the developments of early 1942 and say a few words concerning the future outlook.

PURPOSE AND CHARACTER OF THE EMERGENCY PRICE CONTROL ACT

The Emergency Price Control Act did not make many important changes in the government's price-control policy and methods that were in operation at the time of its enactment. It did give a clear statutory authority, however, for the Executive's price-control program, for which the legal authority had theretofore been rather tenuous. Furthermore, it implemented that authority by the definite provision of adequate penalties for the infraction of its rules.

The first and most important of the declared purposes of the act was "to stabilize prices and to prevent speculative, unwarranted, and abnormal increases in prices and rents." The prices of agricultural products (unless they should rise above 110

per cent of parity¹—which would mean substantial advances for most² articles) and the wages of labor were excluded from the controls authorized by the act.

The law was declared to be an emergency war measure, which should cease to be effective on June 30, 1943, or upon a date proclaimed by the President, or upon the date specified in a concurrent resolution by the two houses of Congress declaring that the further continuance of its authority was not necessary—whichever date should be the earlier.

For the administration of the act there was created an Office of Price Administration under the direction of a Price Administrator. The Administrator was given very broad powers for collecting information, formulating selective price controls, and enforcing these controls. Adequate provisions were made for federal court appeals from the Administrator's decisions. To implement his authority the Administrator was given the important power to impose, whenever he should consider it necessary, a licensing requirement as a condition for selling any commodities whose prices were subject to his control.

Concerning the stabilization of commodity prices, the most essential provision of the act (Sec. 2 *a*) is:

Whenever in the judgment of the Price Administrator . . . the price or prices of a commodity or commodities have risen or threaten to rise . . . inconsistent[ly] with the purposes of this

¹ For an explanation of agricultural price "parity," see pp. 147-148.

² See p. 147, footnote.

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Act, he may by regulation . . . establish such maximum price or maximum prices as in his judgment will be generally fair and equitable. . . . So far as practicable, . . . the Administrator shall . . . give due consideration to the prices prevailing between October 1 and October 15, 1941 . . .

Before issuing any price-regulating order, the Administrator is required, as far as practicable, to consult with representatives of the industry affected. Furthermore, in cases where maximum prices have been established the Administrator is required, on the request of any substantial portion of the industry subject to such maxima, to appoint an advisory committee, or committees, consisting of representatives of the industry to consult with him concerning the price regulations in the industry.

PRICES OF AGRICULTURAL PRODUCTS AND WAGES

Aside from the fact that the act provided for selective price regulation rather than for an over-all ceiling, even in part because of that fact, the two provisions of the law that aroused most discussion were those relating to the prices of agricultural products and to wages. On those two questions, in the enactment of the law, politics rather than economics finally dominated.

The law gave to the Price Administrator no authority whatever to regulate wages. In fact, there was a specific provision that nothing in the law should

be construed to authorize the regulation of "compensation paid by an employer to any of his employees" or to "rates charged for any professional services."¹

On the subject of prohibiting the regulation of the prices of agricultural products, the law took an extreme position. Although it authorized the fixing of price ceilings on agricultural products, it required any ceiling so fixed to be the highest of four alternative ceilings and made it subject to the approval of the Secretary of Agriculture.²

The Agricultural Adjustment Act of 1938 had undertaken to stabilize agricultural prices, by means of restrictions on the production and sale of agricultural products by farmers and through the payment of what, in essence, were federal bounties to farmers complying with these restrictions. To this end provision was also made for a system of government loans to farmers on the security of agricultural products on terms that were equivalent to a guaranteed purchase of the produce by the government at prices that in most cases would otherwise have been substantially above the market level. The object was to establish for these products so-called "parity" prices.

"Parity" was defined as follows:

¹ Among the other exceptions were rates charged by common carriers and public utilities, rates charged in the business of selling or underwriting insurance, and rates charged in the publishing business, or in the business of radio broadcasting, motion pictures, theatrical performances, or outdoor advertising.

² See pp. 148-149.

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. . . that price for the commodity which will give [it] a purchasing power with respect to articles that farmers buy equivalent to . . . [its] purchasing power in the base period; and, in the case of all commodities for which the base period is the period August 1909 to July 1914, [a price] which will also reflect current interest payments per acre on farm indebtedness secured by real estate, tax payments per acre on farm real estate, and freight rates, as contrasted with such interest payments, tax payments, and freight rates during the base period. The base period in the case of all agricultural commodities except tobacco shall be the period August 1909 to July 1914, and, in the case of tobacco, shall be the period August 1919 to July 1929.

The 1909 to 1914 base period chosen for agricultural products (except tobacco) was a period during which these agricultural prices for peacetimes were at a level very favorable to farmers in comparison with the prices of the commodities "that farmers buy." The period 1919 to 1929 was chosen for tobacco, because tobacco prices were low in the period chosen for other agricultural products and were high in the period 1919 to 1929.

"Parity" prices thus chosen were for the most part high prices. They could obviously establish no claim to be considered sacrosanct, or even normal, prices despite the connotation of the word.

In the light of this law of 1938 let us look at the provisions concerning agricultural products contained in the Emergency Price Control Act of 1942. In their essentials they were as follows:

No maximum price shall be established or maintained for any agricultural commodity below the highest of any of the following

PRICE CONTROL UNDER THE ACT OF 1942

prices, as determined and published by the Secretary of Agriculture: (1) 110 per centum of the parity price for such commodity . . . ; (2) the market price prevailing for such commodity on October 1, 1941; (3) the market price prevailing for such commodity on December 15, 1941; or (4) the average price for such commodity during the period July 1, 1919, to June 30, 1929.¹

PRICE SITUATION BETWEEN ENACTMENT OF THE PRICE-CONTROL LAW AND THE PRESIDENT'S ANTIINFLATION MESSAGE

After the Emergency Price Control Law was enacted on Jan. 30, 1942, the Office of Price Administration rapidly extended its price controls over a wide field of commodities. By the end of 3 weeks Price Administrator Henderson announced in a pub-

¹ A table covering 25 selected agricultural commodities, and giving (1) actual prices of May 15, 1942, (2) parity prices of the same date, and (3) percentages by which actual May prices must rise or fall to reach minimum ceiling prices was published by the United States Department of Commerce in *Survey of Current Business* for June, 1942. For 19 of the 25 commodities advances in prices would be required to bring them up to the minimum ceiling price, while for only 6 of the commodities were the prevailing prices then above the minimum. Among those requiring advances were

Rye	103 per cent
Hay	83 per cent
Wheat	48 per cent
Corn	32 per cent
Cotton	12 per cent

Among the six commodities whose prices were already above parity were

Lambs	4 per cent
Wool	8 per cent
Hogs	8 per cent
Beef cattle	12 per cent

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lic address that his office then had some 45 to 50 per cent of all the 900-odd commodities of the Bureau of Labor Statistics Wholesale Price Index Number under some kind of formal or informal control.¹ During the 9 weeks intervening between the date of this statement and the President's message of April 27, the field of price control was being continually extended.

From January through April representative price and wage indexes advanced as shown in the following table.

Group	Percentage Increase
28 Basic commodities ¹ —average of daily figures (Bureau of Labor Statistics)	2.0
Domestic agricultural commodities ² (Bureau of Labor Statistics, basic commodities)	4.5
Wholesale prices (Bureau of Labor Statistics, 889 commodities)	2.8
Retail food prices (Bureau of Labor Statistics)	2.9
Cost of living (National Industrial Conference Board)	2.7
Wages—90 industries (Bureau of Labor Statistics) .	4.3
Wages, weekly—25 manufacturing industries (National Industrial Conference Board)	3.2

¹ Jan. 30 = 165.0, and Apr. 27 = 166.7, an advance of 1.03 per cent.

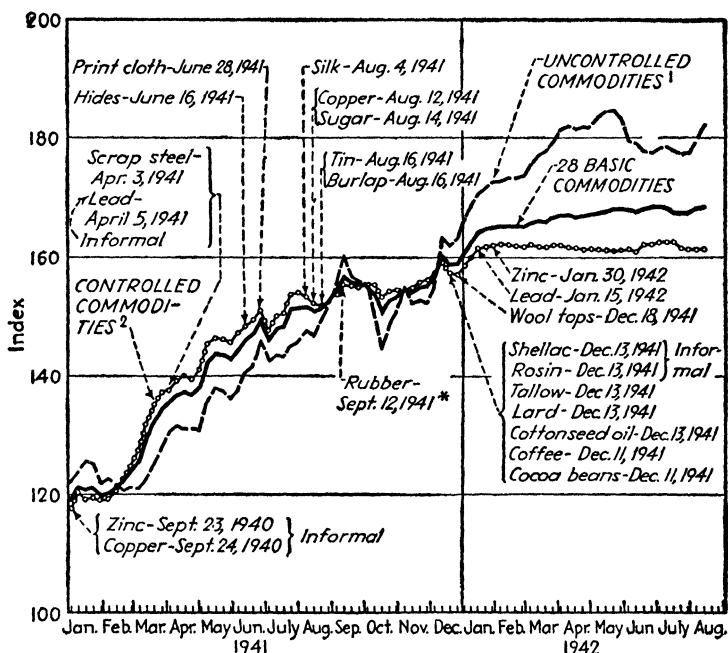
² Jan. 30 = 179.0, and Apr. 27 = 184.3, an advance of 3.0 per cent. During this period of about 3 months some farm commodities showed decided price advances, *viz.*, hogs 19.2 per cent, steers 10.9 per cent, and butter 7.6 per cent.

For the year 1941 and the first 8 months of 1942 the wholesale price of the 28 basic commodities for

¹ Address before the National Farm Institute, Des Moines, Iowa, Feb. 21, 1942.

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which the Bureau of Labor Statistics publishes daily figures have been grouped by the bureau into two



* Maximum price announced by Rubber Reserve Company

¹ Includes throughout: Wheat, Flaxseed, Barley, Corn, Butter, Hogs, Steers, Cotton

² Includes throughout: Zinc, Copper, Lead, Scrap steel, Hides, Print cloth, Silk, Rubber, Sugar, Tin, Burlap, Coffee, Cocoa beans, Tallow, Lard, Shellac, Rosin, Cottonseed oil, Wool tops

(United States Department of Labor, Bureau of Labor Statistics)

CHART VII.—Wholesale prices, 28 basic commodities, weekly as of Friday. August, 1939 = 100

classes, i.e., those of controlled commodities and those of uncontrolled commodities, and published in the chart that is reproduced above.

Despite the fact that such controls as had been

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established up to the end of April, 1942, had apparently proved reasonably effective, there was a widespread and rapidly growing feeling on the part of the public that the inflationary forces were getting out of hand and that a more comprehensive and vigorous price-control policy was needed.

At the end of April, 1942, the Office of Price Administration issued *Bulletin* 1, in which it said:¹

General price increases have become a grave threat to the efficient production of war materials and to the stability of the national economy. . . . During 1942 . . . individual income [it is estimated] will total \$117,000,000,000, [of which amount] . . . \$31,000,000,000 will be saved or paid to the Government in personal taxes and \$86,000,000,000 will be spent. The supply of goods and services available for civilian use . . . will total \$69,000,000,000. Thus, demand in 1942, unless limited, will exceed supply by \$17,000,000,000. . . .

[This so-called inflationary gap] between the total purchasing power available for disposal by the people . . . and the total supply of goods and services available for them to purchase has caused, in recent months, a general advance in prices and an advance which is accelerating in rate. . . . The \$17,000,000,000 [gap] . . . if left to itself, would force an estimated increase of 25 per cent in the cost of living this year. But price increases build on each other. Increases in the cost of living lead to wage adjustments. These in turn augment purchasing power at the same time that they increase industrial costs. . . . Left to itself, the process has no definite end. It can be stopped only by measures which will eliminate the occasion for increased income payments on one hand, and narrow the gap by withdrawing excess purchasing power on the other.

¹ *Federal Reserve Bulletin*, May, 1942, pp. 441-442.

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Out of this situation came the President's message of April 27 to Congress on "Control of the Cost of Living," and his radio address of the following day, which was devoted in part to this subject.

PRESIDENTIAL ANNOUNCEMENTS CONCERNING PRICE CONTROL

Concerning price control, the principal recommendations of these two announcements may be briefly summarized as follows:

The rise in the cost of living during this war is beginning to parallel that of the last war. It has already gone up about 15 per cent since the autumn of 1939. We must act now to hold it somewhere near the present level. To keep the cost of living from spiraling upward, our present national economic policy consists of the following seven points, *viz.*:

1. We must tax heavily.
2. We must fix ceilings on the prices which consumers, retailers, wholesalers, and manufacturers pay for the things they buy; and ceilings on rents for dwellings in all areas affected by war industries.¹
3. We must stabilize the remuneration received by individuals for their work.
4. We must stabilize the prices received by growers for the products of their lands.

¹ No reason is given for not placing ceilings on rents for dwellings in other areas, and the reason is certainly not obvious so long as ceilings are to be placed on the prices of most other necessities of life.

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5. We must encourage all citizens . . . [to purchase] War Bonds with their earnings instead of using those earnings to buy articles which are not essential.

6. We must ration all essential commodities of which there is a scarcity, so that they may be distributed fairly among consumers and not merely in accordance with financial ability to pay high prices for them.

7. We must discourage credit and installment buying and encourage the paying off of debts, mortgages and other obligations.

In this seven-point program the only two points that were highly controversial were points 3 and 4 covering, respectively, wages and the prices of farm products, points on which there has been widespread criticism of the President on the ground that he did not go far enough. It will be noted that while the President proposes to "fix ceilings" on other designated prices and rents, when he comes to the prices of farm products and the remuneration of workers he uses the word *stabilize*.

Although the President continues to favor the government's long-established "parity" policy for the prices of farm products, he recommends a reduction to 100 per cent of the "110 per cent of parity rate" established by the act of Jan. 30, 1942.

In regard to the subject of stabilizing remuneration for work, the President took the position that no further legislation was required and that stabilizing the cost of living would mean that wages in general could and should be kept at existing scales. "We must stabilize wages. . . . You will have to forego

higher wages for your particular job for the duration of the war," he said in his radio address.

The arguments pro and con on the subject of the advisability of giving the Price Administrator adequate powers to place ceilings on the prices of agricultural commodities and on wages were largely based on problems of administration and on considerations of a broadly sociological character, such as the desirability of maintaining agriculture as a way of life, the importance of agriculture to the war effort, and the need of maintaining the recently won "social gains." These considerations are important, but a discussion of them does not belong to an elementary book on inflation.

From the standpoint of inflation the all-important fact is that agricultural products and the services of labor are very important elements in our commodity-price level, and if their prices are excluded from the field of effective price control, any attempt to restrict inflation at all adequately will break down.

Agricultural products such as foods, cotton, hides, and wool are raw materials for countless manufactured products. Their prices enter into the cost of living of all workers. If they rise, the prices of the worker's food rise, as do the prices of most of the manufactured products he buys, and unless his wages increase proportionately, he suffers.

Wages are elements in the costs of all manufactured and mineral products, and for many of them they are the largest single element. If wages are ad-

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vanced, these advances tend to push up the prices of the manufactured goods that the farmer buys, and this, in turn, pushes up the farmers' price "parities," and so on in an endless spiral.

Furthermore, if the farmer is guaranteed prices for his products high enough to give him a constant purchasing power over the goods he buys, he is largely exempted, except to the extent that he is taxed and rationed, from the necessity of making economic sacrifice in the war effort. The same is true of the laborer if he is guaranteed wage increases commensurate, or more than commensurate, with the rise in his cost of living. If, however, farmers and laborers do not carry their fair shares of the economic cost of war, other classes in the community—classes constituting a minor part of the total—must carry much more than their own fair shares.

Such a situation, however, would not last long. If wages and the prices of farm products are not adequately restricted but are permitted to spiral upward in the manner just described, the whole price situation will get out of control, and farmers and laborers as well as all the rest of the community will be engulfed in a rising tide of inflation.

PUTTING INTO EFFECT THE OVER-ALL PRICE-CEILING PROGRAM

Immediately after the President's announcement on April 27 of the over-all price-ceiling policy, the

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Office of Price Administration issued the general maximum-price regulation, giving this policy definite form, content, and implementation.¹

Coverage. Aside from the important facts already discussed, such as that the ceiling does not cover wages and most other charges for personal services and does not limit the prices of farm products until they rise above 110 per cent of "parity," the price coverage is very broad. Specific exemptions, however, are made to certain other classes of commodities of which the more important are the following: (1) prices of securities, on the ground that these prices do not affect the cost of living; (2) prices of books, magazines, newspapers, and motion pictures, which are exempted from price control by the law itself; (3) prices of the services of public utilities, which are regulated by government authority; (4) prices of certain commodities almost exclusively purchased by government agencies for use in the war effort; (5) prices of certain raw materials such as domestic ores and ore concentrates, logs, and pulpwood; and (6) the prices of a miscellaneous lot of commodities, which are exempted for such reasons as lack of standardization (for example, live animals), infrequency and usual small size of transactions, or the fact that the price of the commodity is subject to regulation at a subsequent stage of its production or distribution.

¹ See *Federal Reserve Bulletin*, May, 1942, pp. 441-449, also *Business Week*, May 9, 1942, pp. 27-40.

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Ceilings. The ceilings for each seller in general are the maximum prices he charged for the respective commodities during the base period, which is the month of March, 1942. The maximum for each commodity, therefore, varies among sellers.

For wholesalers and manufacturers the ceilings became effective May 11; for retailers, May 18; and for services (such as repairs sold at retail), July 1.

Miscellaneous Provisions. As a means of control all wholesalers and retailers must be licensed by OPA, but the licensing is automatic. Machinery is established for making appeals from the general regulation and obtaining administrative relief in cases where adequate cause can be shown. Violation of the regulations is subject to heavy penalties, including the suspension of the violator's business. Buyers who believe themselves to have been cheated on any commodity they have purchased "for use or consumption other than in the course of trade or business" are permitted to bring suit against the seller for \$50 or for treble the amount by which they have been cheated (whichever is the greater) plus court costs.

THE FUTURE

Such is the situation at this writing in August, 1942. What of the future?

Economic prophecies are exceedingly dangerous in times like these, when war and politics seem to dominate everything. I shall not, therefore, assume

the role of a prophet and try to forecast how far inflation will progress in the United States before peace returns and how effective the various controls we are establishing will prove to be. I shall merely emphasize in conclusion a fact mentioned before, that in a democracy like our own inflation in time of war is practically always extensively resorted to as a means of emergency financing *because it is the line of least political resistance*.

Unless we are to experience a serious inflation during this war and particularly during the early period of the peace that follows, our government will have to show more political courage than it has to date in such vital matters as the taxation of people in the lower income brackets, government borrowing from the banks, uneconomical expenditures of public money for nonwar purposes, the silver racket, the control of wages, and the control of the prices of farm products.

What we need above all else in these matters is patriotic courage in Washington, to resist the political pressure of selfish class interests, and the strong support by all patriotic citizens of the public men who exhibit such courage.

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